SPECIAL TIME EDITION

COLLECT ALL FOUR COVERS!

Pokémon

The Games. The Shows. The Evolution.

25 Years: Pokémon in America

The World's Most Valuable Media Franchise

How to Master *Pokémon GO*

Pikachu

TIME

Pokémon

Pokémon the Movie: I Choose You! *(2017) chronicles how Ash and Pikachu began their adventure.*

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Gotta Catch Them All!

Pokémon IS FOR EVERYONE

Whether you're a kid opening a pack of trading cards for the first time or an adult who grew up on the original games, Pokémon gives you plenty of reasons to catch them all.

BY COURTNEY MIFSUD INTREGLIA

A *POKÉMON* GAME COMES WITH a few guarantees. You begin as a young trainer, leaving home to meet with a local authority figure, ranging from a professor to a school administrator. That figure gives you a choice of three "starter" Pokémon, each one representing a different elemental typing—always fire, water, and grass. You're given a handful of Poké Balls, the in-game apparatus used for catching the mythical beasts, in addition to a Pokédex, a portable device for tracking your progress in the game's central theme: catching them all. Insidious villains will surely get in your way, and in order to complete the game, you need to beat a set number of Gym Leaders, each with their own special typing.

Over the years, iterations of the core games have added new features and opened up the world for exploration, but the same formula remains. And while those who have enjoyed Pokémon since its early years have grown up, there are now multiple generations after them who are coming to the franchise for the first time.

Pokémon Appeals to All Ages

Pokémon is the highest-grossing media franchise of all time, having pulled in $100 billion among games, box office, and licensed products. When compared with Mickey Mouse & Friends, Hello Kitty, and Star Wars, the Pokémon franchise has grossed more in its 25 years than those individual franchises have throughout their lifetime. (A media franchise is a universe in which characters interact with one another. Star Wars and Mickey Mouse & Friends are different worlds, and therefore different franchises, even though both are owned by Disney.) Pokémon has been able to maintain such success largely due to its ability to appeal to both children and adults.

So many kids called out of school when the first Pokémon *movie premiered that the mass phenomenon was dubbed the "Pokéflu."*

Above: The closing ceremony at the Pokémon GO Fest in Dortmund, Germany, in July 2019.
Opposite: Playing Pokémon Puzzle League *on the Nintendo 64 console in 2000.*

There are a lot of reasons for kids to love Pokémon. Ash Ketchum, the anime's lead character for more than 25 years, has remained 10 years old throughout the show's many seasons. Whether you were 10 years old in 2000 or 10 years old in 2023, Ash and his friends are of an age that you can connect with. Plus, swaths of Pokémon-themed products are marketed to younger audiences, including stuffed plushies, activity books, and educational electronics. The games are all turn-based, so new readers can take their time with the screens, and story themes are simple (e.g., Team Rocket has an evil plan).

Then *Pokémon GO* was released in 2016. For the first time, the main character of a *Pokémon* game was distinctly modeled as an adult. At this point, fans who started as children and had been playing *Pokémon* since its U.S. release in 1998 were now adults. Those gamers who had either stepped away from the franchise or were coming to it for the first time could connect to the world through an avatar made to look more like them. A 2019 study published in the journal *Universal Access in the Information Society* surveyed *Pokémon GO* players about their demographics and found that the nostalgic elements, such as attachment to the Pokémon themselves or childhood memories, were key reasons adult participants enjoyed the game.

Pokémon's Inclusivity Is Evolving

Video games have not always been an inclusive space. Many of the classic games featured white male protagonists as the only playable character option. The first *Pokémon* games were no exception, as they featured a singular boy avatar (named Red or Blue, depending on which game you were playing). But the following generation of games (*Gold, Silver,* and *Crystal*) introduced the option to choose one's gender: male or female. Just like the young and infantile starter Pokémon creatures, the games had a lot of evolving to do.

In 2011, *Pokémon X* and *Y* allowed for character creation beyond the girl or boy binary and added options for trainers to change their skin tone and eye color, as well as their hair. Diverse representation allows players to see themselves reflected in the characters they play, and in 2011, Pokémon

took a big step toward making sure all trainers felt welcome in the games. Recent entries in the series ask players to "choose a look" or "choose an appearance" that best represents them, allowing players who identify as nonbinary to avoid shoehorning into a gender. The newest generation of *Pokémon,* 2022's *Scarlet* and *Violet,* removed gendered locks on in-game clothing items, allowing all avatars to don the same clothing and hair.

But there are things the game developers could have done better. Though the initial character creation doesn't force a choice between a male and female, a character introduced early in the game insists on defining your character as "Master" or "Miss" for the entirety of the game, making the fact that players can customize themselves as nonbinary irrelevant.

In addition to cultural inclusivity, *Pokémon* is also accessible to a wide scope of players at different levels. Most *Pokémon* games can be played one-handed, the story and progression are linear, and they don't require aiming or button-mashing. Your success or failure in the game isn't dictated by how quickly or accurately you can press a button. You can slow down, think, and process the choices. Recent series entries include added accessibility options such as removing battle animations that might be too flashy or overstimulating, "casual controls" that allow one-handed play, and added subtitles. However, accessibility-centered review sites have flagged that newer aspects of the *Pokémon* games, such as timed mini games and bugs with the accessibility features, have made the recent entries less playable for some players who have relied on the historically accessible franchise.

A Powerful Community

Certain fan communities dedicated to specific games have been the topic of research for their social toxicity and cyberbullying. But with Pokémon, the community, online and in person, is based on collaboration and supportive competition. Game Freak, the company that created the *Pokémon* games, and the Pokémon Company organize promotional events, contests, and competitions. That led to the creation of a website called Smogon University, a fan-made community that connects a large number of Pokémon devotees outside official forums and events. With more than 450,000 members, Smogon is known as the most comprehensive and accurate online resource for competitive *Pokémon* battling. It provides its own tournaments where players can apply the competitive skills they learn through the website and its forums. The site is just one example of how fans of *Pokémon* come together, creating their own experiences alongside official game releases.

I picked up my first Pokémon game in 1998—*Pokémon Red* on Game Boy Color—and played every generation that followed. My brother is a trading card collector who can tell us which cards are super valuable and which are not worth selling. Even my parents couldn't resist the Poké-pull: My mom has been playing for more than a decade, and she nudges my brother and me to trade our version-exclusive Pokémon with her so that she can complete her Pokédex.

When many adults found their way back to Pokémon with the release of *Pokémon GO,* I enjoyed the franchise coming back into the zeitgeist, as it's my nephews' favorite iteration of the games. Holiday family get-togethers often entail a brief struggle over which season of the anime to put on in the background—I, of course, push for *The Indigo League,* which came out in 1998.

Everyone I know plays *Pokémon* a little bit differently. My husband is a competitive player who bookmarks Smogon on every device and is in the know about how to maximize every Pokémon's stats. I'm much more casual, enjoying each new game as an opportunity to revisit one of my favorite worlds.

Maybe you started playing the games when I did, or maybe you're avid trading card hobbyist. Or maybe you're completely new to the franchise and want to see what Pokémon is all about. No matter your level of engagement with this world, Pokémon has something for everyone.

1

The Journey Begins

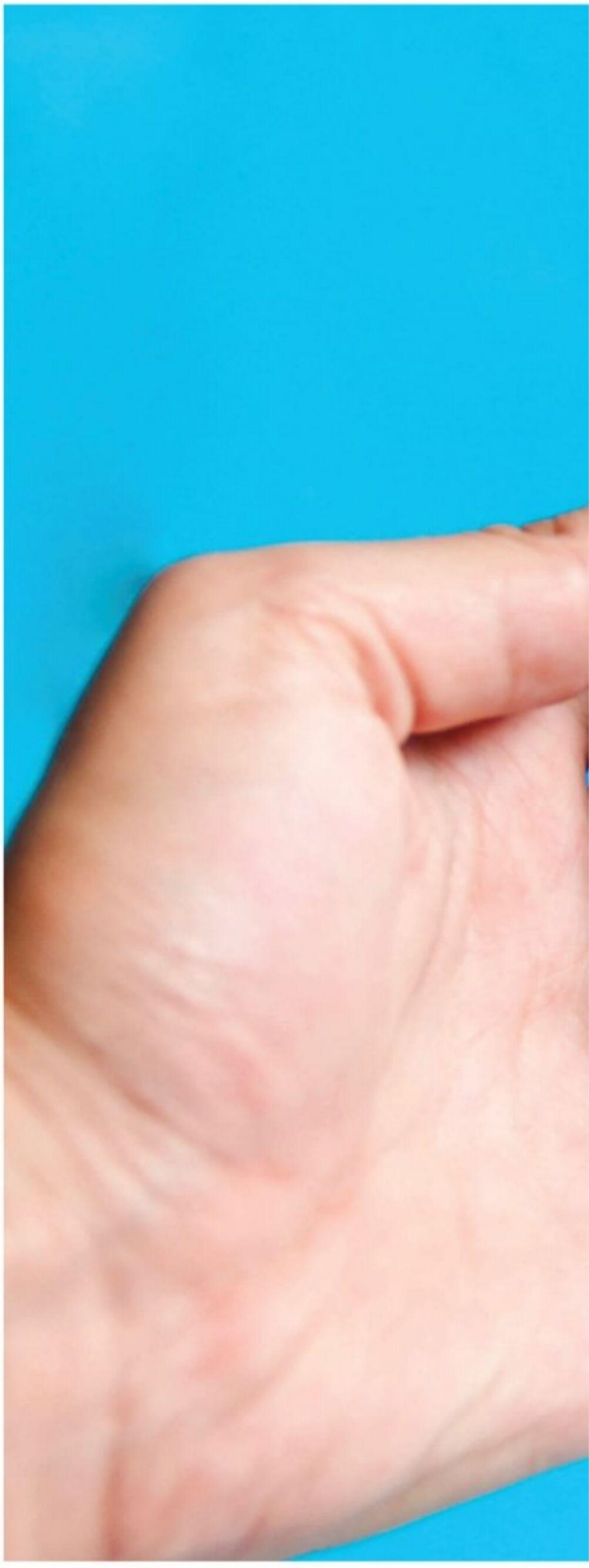
The story of Pokémon's success involves passionate developers, savvy marketing moves, and a love for the namesake creatures.

Ash and Pikachu were the main characters of the Pokémon *anime for 25 years.*

The Path to Pokémon

Collaboration and connection were crucial to the franchise's philosophy from the very beginning.

BY COURTNEY MIFSUD INTREGLIA



IT WAS A PARTICULARLY HOT day in Topeka, Kansas, on Aug. 27, 1998. Temperatures reached a sweltering 97 degrees, making it one of the most scorching days that month. For the 2,500 lucky kids gathered in the city, it was about to start raining–raining Pikachu, that is. That afternoon, 700 stuffed Pikachu were dropped from the air, along with 10 skydivers who landed and then raced away in yellow Pikachu-themed Volkswagen New Beetles, each painted yellow, with two pointy ears fixed to the roof and a lightning-bolt tail on the back.

The Poké-themed bonanza was a month before the *Pokémon* anime's North American debut and celebrated the arrival of the games (which were already wildly popular in Japan) in the U.S. "Pokémon 'Pretty Neat,'" read the front page of the *Topeka Capital Journal,* alongside a picture of a 7-year-old hugging a gigantic Pikachu plush. Nintendo chose Topeka because it was in the

Pokémon Blue
landed in the
U.S. in 1998.

"PokéCars" toured the country to celebrate the North American release of the video games.

center of the country. As part of the event, the city officially renamed itself "ToPikachu" for the day. "They came. They saw. They sold," continued the newspaper article, noting the display of energy for nabbing merchandise for a franchise that hadn't technically been introduced en masse yet.

That hot August day might have marked Pokémon coming to America, but the story of Pikachu and friends had begun years earlier, with a young Japanese boy who loved arcade games and bug collecting. Satoshi Tajiri was raised by his parents, a Nissan salesman and a housewife, in the Tokyo suburb of Machida in the late 1960s. This was before the city's development into a metropolis, although concrete and scaffolding were steadily creeping outward. As a young boy, Tajiri spent his time in fields, ponds, and forests collecting insects and other tiny creatures—a popular hobby for kids in Japan. He was so enthusiastic that his friends nicknamed him "Dr. Bug."

"As a child, I wanted to be an entomologist. Insects fascinated me," Tajiri told TIME in 1999. "Every new insect was a wonderful mystery. And as I searched for more, I would find more. If I put my hand in a river, I would get a crayfish. Put a stick underwater and make a hole, look for bubbles, and there were more creatures."

These critters provided inspiration for "Bug"-type Pokémon, a frequent presence in early *Pokémon* games, lurking in fields of tall grass and foreboding forests. Tajiri was able to preserve the world of his childhood in *Pokémon*—for instance, Poliwhirl has a belly decorated with a little swirl, which was inspired by Tajiri's memory of the transparent skin of a tadpole with its coiled innards visible beneath. "Everything I did as a kid is kind of rolled into one thing," said Tajiri. "Pokémon."

In the late '70s, rice fields gave way to apartment buildings, and ponds were paved over for shopping centers and train lines. "A fish pond would become an arcade center," Tajiri reflected. He was getting older, too, and in those arcade centers he fueled his newer passion: video games. Raised on *Space Invaders,* the deeply influential fixed-shooter game that debuted in 1978, Tajiri skipped going to college and instead studied electronics at a two-year technical school. "It was as sinful as shoplifting," he said of skipping college. "My parents cried that I had become a delinquent." According to TIME, Tajiri was such a fan that one arcade gave him a *Space Invaders* machine to take home.

Tajiri was a self-made creator even as a teenager, and he funneled his passion for gaming technology and arcades into *dojinshi* (self-published mag-

azines), launching a series in 1981. Called *Game Freak* (a phrase that now splashes across the opening sequence of every *Pokémon* game), the magazines provided helpful strategies and game tips. *Game Freak* was embraced by gaming devotees as a resource for tricks to master any of the games found in an arcade. One of the *Game Freak* collaborators was Tajiri's friend Ken Sugimori, who would eventually design all the Pokémon and oversee art direction for the movies and merchandising. Like Tajiri, Sugimori had a love of video games, along with a childhood fascination with cartoons and animation.

But writing about video games and the industry wasn't enough for Tajiri—he wanted to make them. At the time, arcade games were minimally reinvented versions of games from a decade prior. Tajiri said, "Our conclusion was, there weren't too many good-quality games, so let's make our own."

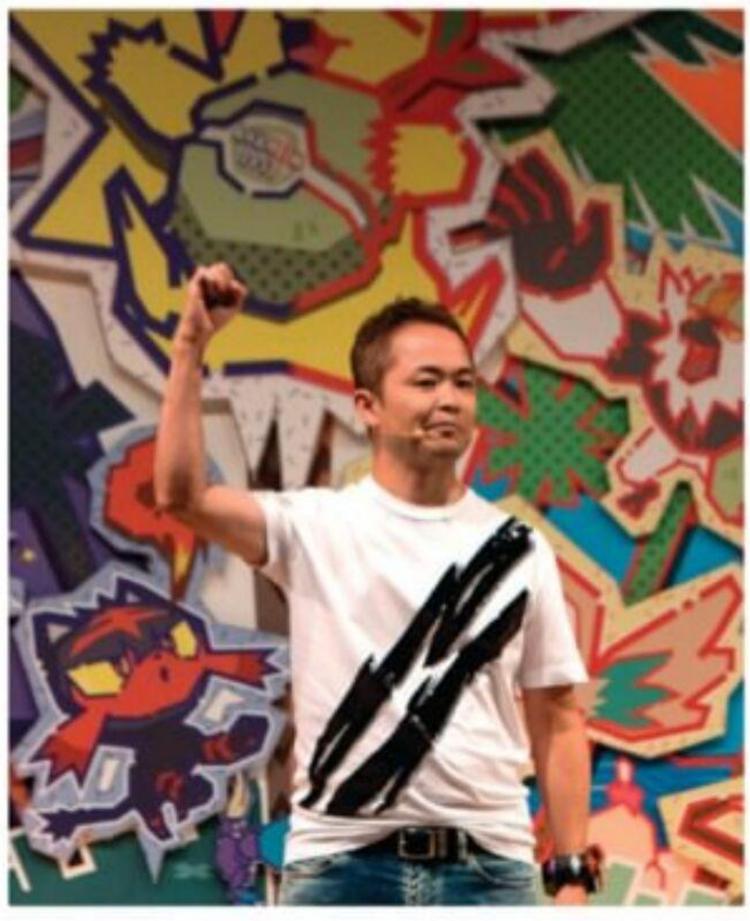
DURING *GAME FREAK*'S PUBLISHING DAYS, Tajiri met Junichi Masuda, a programmer and composer. Along with Sugimori, Masuda was on board with Tajiri's idea to transition the magazine into a video game company. They just had to figure out how to make games.

Tajiri's background in electronics came in handy when he embarked on his game-creation journey. He took apart a Famicom, a Nintendo Entertainment System that was the most popular video game console in Japan, to see how it worked. "The Famicom system released in Japan and video games in the home were starting to become a thing," Masuda told the monthly magazine *Game Informer* in 2018. "We knew we couldn't create an arcade game, but if it was on the Famicom, we knew we might be able to do something ourselves." The newbie game creators got to work on a game called *Quinty,* which was later released in America as *Mendel Palace,* published by Bandai Namco.

Then called Namcot, the video game publisher told Tajiri that they only wanted to work with companies, not individual creators. "When we first started making the game, we didn't really have any official development equipment, so we just sort of had to hack the Famicom and figure out how it worked so we could develop it ourselves without the official tools," Masuda said.

During this time, Tajiri was in talks with Nintendo about making games, and with the 1991 puzzle game *Yoshi,* the relationship became official. *Yoshi* was a success, and Nintendo offered Game Freak a Super Famicom game called *Mario & Wario,* which was never released in the U.S. With a few games under their belt, Game Freak showed Nintendo their earliest ideas for *Pokémon,* created on units that Nintendo let them borrow. "With *Pokémon,* we were just kind of making it ourselves at first. We did present a game concept to Nintendo,

Shigeru Miyamoto (below left) and Junichi Masuda (right) worked alongside Satoshi Tajiri to create the Pokémon *games.*



and they said, 'Okay, good luck. As long as you guys have money, keep working on it.'" Masuda said. At the time, Game Freak had around 10 employees, and making *Pokémon* (including the initial planning phase) lasted nearly six years. Developers pulled double duty, and paychecks often came late. The only developers who ultimately stayed on the project were Tajiri, Sugimori, and Masuda.

Although Tajiri had learned to build video games on the in-home Famicom console, he wanted an entirely different system for *Pokémon*—a handheld one. It just so happened that Nintendo had a sizable thick gray rectangle that was exactly what Tajiri yearned for: the Game Boy.

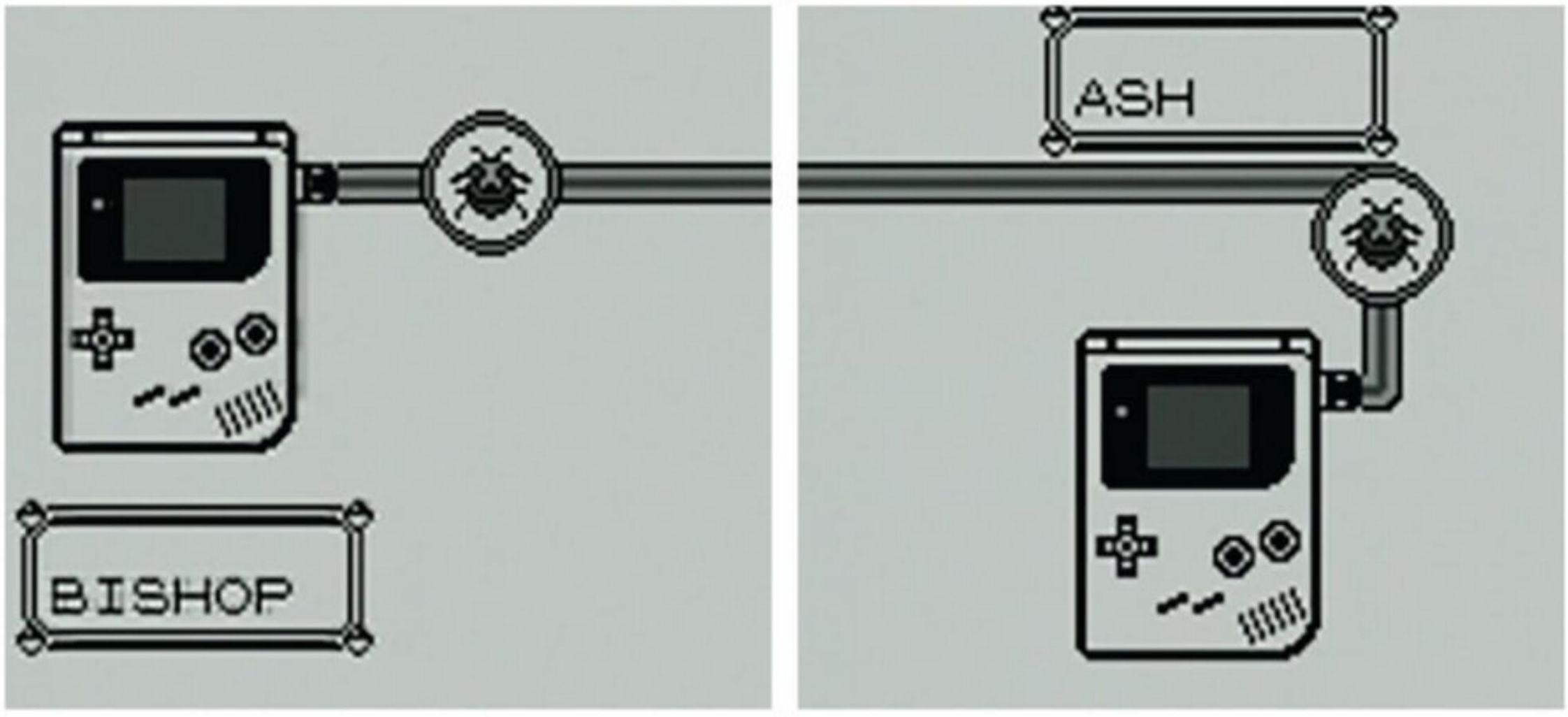
Today, the mechanical behemoth looks archaic next to the slim, compact technologies at consumers' fingertips. And even in its heyday, handheld competitors outpaced the Game Boy. Atari's Lynx and the Sega Game Gear were handheld systems that were overall more powerful than Nintendo's Game Boy. These systems were capable of better graphics and better sound, and they looked a lot sleeker.

But the Game Boy and its comparably simple-looking games had one serious edge over the competition: battery life. "Despite being outmatched in power and graphics, the Game Boy crushed its competition thanks to its ability to, one, give players the experiences they wanted and, two, give them these experiences for a very long time," wrote pop culture writer Daniel Dockery in his book *Monster Kids: How Pokémon Taught a Generation to Catch Them All*. "The user manual claims that, depending on the 'Game Pak and temperature,' the four AA batteries could power up to 15 hours of gaming. That's borderline eternal when you put it next to the Sega Game Gear, which lasted from three to five hours with an army of six AAs before bidding players adieu. A Sega Game Gear died an ugly death on a too-long car ride, while a Game Boy laughed at its mortality."

While the battery life was outstanding, Tajiri had his focus trained on one key feature that would become the backbone of early *Pokémon* games: a cable that could link two Game Boys together. The console's linking system allowed players to connect to each other's Game Boy through a cable that was plugged into a port on the console's side. Every Game Boy came with one of these cables, so players were guaranteed to have one lying around. Before *Pokémon,* the cable was used exclusively for players to link up and compete, most notably on games like *Tetris*. But Tajiri had an even more collaborative intention for his game. He envisioned players trading Pokémon back and forth, working together to complete their collections. "The moment I saw the Game Boy, the link cable really captured my attention, but at the time, most games only used it for battling. I feel the word 'connection' has a rather beautiful array of meanings to it, and I thought the link cable could be used to transfer all kinds of information, like TV or radio. I had a feeling we could do something interesting with it, and that resulted in a system where you can trade the creatures you've raised," Tajiri explained in an interview published an official Japanese *Pokémon* book called *Pokédex*. "In *Dragon Quest,* there's a rare item called the Mad Cap—and Sugimori was talking about how he had two of them. I'd spent so many days trying to get a Mad Cap of my own, but I just couldn't get one. So I just thought, 'Well, since he has two, why can't he give me one?' So our original idea for *Pokémon* wasn't 'We want to make an RPG [roleplaying game]'—instead, it was 'We want to trade.' The fact [that] it's an RPG came later."

The console's linking cable allowed players to connect to each other's Game Boy through a cable that was plugged into the console's side.

With the console and concepts in place, and the ink dry on the deal with Nintendo, Game Freak was ready to start making their game. But having never made a game of this scope, the Game Freak team hit some early bumps in the road that delayed development. "We figured we could probably make a Game Boy game in about six months. But our goals for *Pokémon* just grew and grew, so we eventually realized it'd be difficult to develop that quickly. Of course, ultimately our six-month plan didn't work out [*laughs*],"



Trading Pokémon via link cable was a crucial element in the original game design. Here, the in-game art illustrates such a transfer.

Tajiri said in the July 2000 issue of *Nintendo Online Magazine*. "Making games is kind of like making a plan to hitchhike from point A to point B. You make a rough version of the game and constantly want to double-check everything. And while you're constantly repeating a bunch of small experiments, half a year passes by."

Without much initial financial investment from Nintendo, Tajiri and Game Freak essentially had to figure it out themselves. Thankfully, a legend in the making at Nintendo stepped in to aid them on their journey.

By the middle of the 1990s, Shigeru Miyamoto had helped to create some of the most successful games ever: *Mario, Donkey Kong,* and *The Legend of Zelda.* He had worked for Nintendo since the mid '70s and had the ear of its president. Miyamoto vouched for Tajiri's idea, and with his support, Nintendo made the deal with Game Freak.

Miyamoto also made a call that would alter the trajectory of the entire franchise. He suggested putting different Pokémon on different game cartridges, giving each one unique monsters exclusive to that version. If players wanted to complete their catalog of Pokémon, they'd have to trade with someone who had the other version. "[Shigeru Miyamoto] was actually one of the people who suggested doing two versions of the game," Masuda said. "Even if we were to have that idea here at Game Freak, we would have assumed there was no way [Nintendo] would produce two versions of a game. They just wouldn't do that."

DEVELOPMENT FOR THE ORIGINAL *Pokémon* games lasted six years from ideation to release. During that time, Game Freak worked on several other projects, including *Pulseman, Mario & Wario,* and *Yoshi,* in order to keep the lights on. Late in the *Pokémon* game's development, Masuda recalled in a 2018 interview with *Polygon,* a severe computer crash almost ended the entire project. "We were developing the game on these Unix computer stations called the Sun SPARCstation 1. … We're developing, and they're these Unix boxes, and they crashed quite a bit. Back then, computers would crash fairly frequently," he said. "Somewhere midway through the development, maybe in the fourth year or so, we had a really bad crash that we couldn't, we didn't know how to recover the computer from. That had all of the data for the game, all of the Pokémon, the main character and everything. It really felt like, 'Oh my god, if we can't recover this data, we're finished here.' I just remember doing a lot of different research. I called

the company that I used to work for, seeing if they had any advice to recover the data."

With a potentially apocalyptic crash on their hands, Game Freak exhausted every option in order to find a solution. "I would go on this internet service provider called Nifty Serve. It's like a Japanese version of CompuServe," Masuda said. "I'd ask people that I never talked to for advice on how to recover the data. I would look at these English books about the machine itself, because there wasn't a lot of information in Japanese, just to figure it out."

During the six years of development, the Game Boy's hardware was outpaced by newer consoles, with sales on a steady decline through the mid '90s. With the downward trend, the developers at Game Freak worried that they had sunk years of work into a system already past its prime. "You didn't really see so many people playing [the Game Boy] out and about at that point," Masuda said. "Even when we were talking to our friends in the industry and saying, 'Oh, we're working on a Game Boy game,' they were like, 'Really? You're working on a Game Boy game? That's not going to sell very well, don't you think?'"

Not only did Game Freak and Nintendo have to worry about their aging hardware, the games came out at the worst time to sell video games. *Pokémon Red* and *Green* were originally set to be released in October 1995, ahead of the holiday season. But the release date was pushed to February 1996. "We originally completed the titles in October and wanted to release them quickly. But we missed the end-of-year sales season and finally released the games at the end of February of the following year—the very worst time of year to release games!" Pokémon Company CEO Tsunekazu Ishihara recalled in an interview with late Nintendo president Satoru Iwata.

ALL OF THESE FACTORS COULD EXPLAIN the lack of immediate demand for the games when they were finally released. Ishihara recalled that sales just hovered "around the edges of the top 10." Critics in Japan were also lukewarm. The reviews in *Famitsu,* a popular Japanese gaming magazine, were fair but not extraordinary, according to Dockery. The magazine used the combined scores of four critics grading the pair of games on a 10-point scale. *Red* and *Green* scored 29/40.

But, word of mouth was powerful when it came to *Pokémon,* and the advent of internet message boards created the perfect setting for a swarm of buzz. "One creature [grabbed] people's attention in a way that others, even the ever-lovable Pikachu, couldn't," wrote Dockery. "To make things even more interesting, it was a Pokémon that wasn't supposed to be in the game at all: Mew."

Mew's inclusion in the Pokémon universe has always attracted a union of rumor and fact. "Ask any millennial about it, and they'll regale you with stories of the 'Mew under the truck,' which was a fake game tip about the creature's location that eventually turned into a piece of Pokémon legend," Dockery wrote. "It was also frequently given to us by our friend's cousin's uncle's brother who definitely works at Nintendo."

The truth is, in the final hours of development, Mew was not in the game. At that point, nothing was supposed to be taken away, added, or altered in any way. But with a surprise amount of bytes to spare, how could the developers resist squeezing in the mythical feline Pokémon? "We put Mew in right at the very end," Shigeki Morimoto, who worked as a programmer on *Pokémon Red* and

The last-minute inclusion of the legendary Pokémon Mew propelled the initial game's release from a mild success to a smash hit.

Green, explained to Iwata. "The cartridge was really full, and there wasn't room for much more on there. Then the debug features that weren't going to be included in the final version of the game were removed, creating a minuscule 300 bytes of free space. So we thought we could slot Mew in there. What we did would be unthinkable nowadays!"

Morimoto figured that the character wouldn't be accessible at the time of launch, and it could possibly serve as a little surprise for fans. "Unless we could think about any good opportunity to do so, the existence of Mew wouldn't have been revealed to the public. It was left in there so it would be ready in case it suited some post-launch activity to make use of it," he said. "But if there wasn't anyone among ourselves who wanted to use it, I thought it would be fine to just leave it as it was." The cat-like Mew was already featured through various bits of lore in the game: Diary entries found in an abandoned mansion describe scientists discovering Mew in a jungle and the experiments that gave birth to Mewtwo, the legendary Pokémon already featured in the game. To the average player, Mew exists in the game but couldn't be found or captured in any accessible region.

But intrepid fans found Mew anyway. "Intent on peering into every nook and cranny of a game and its capabilities, someone did find Mew," wrote Dockery. "By exploiting a glitch based on certain Pokémon stats and basically fooling the game into thinking that Mew had already been unleashed from its colding prison, players could run into the miniature demigod."

In April 1996, CoroCoro Comics announced the "Legendary Pokémon Offer." Twenty winners would get the opportunity to send their *Pokémon* cartridges in and have Mew officially unlocked in their game. More than 78,000 people entered the contest in the hopes of receiving a Mew, and game sales exploded. Both Iwata and Ishihara attributed *Pokémon*'s sales jolt to the success of the Legendary Pokémon campaign. "There was a really incredible response to CoroCoro Comic's announcement of the Mew offer. I feel that's really when things turned around for *Pokémon,*" Iwata said.

WITHIN WEEKS OF *POKÉMON*'S ARRIVAL in Topeka in 1998, American children would pick up Game Boys, slot in red or blue cartridges, and hear for the first time the opening jingle alongside a splash of credits for Game Freak. Their enthusiasm for the games was thanks to a years-long marketing blitz by Nintendo to sell the franchise to American audiences.

The marketing campaign was helmed by Gail Tilden, then the vice president of product acquisition and development at Nintendo of America. "The marketing team was looking at the game and wondering if it would be possible to re-create the popularity," Tilden told Dockery. "What would need to be changed about it to capture the popularity of the game mechanic and engine itself but maybe not the specific art style?"

The marketing team tried to replace *Pokémon* designs with art styles they believed would capture North American fans, specifically a more "graffiti" style. But when he saw the potential redesign, Pokémon Company CEO Ishihara balked at the

overhaul. "The first time we showed off some Pokémon in the U.S., we were told they were 'too cute'. The staff in America submitted their ideas for replacement designs, but we just couldn't believe the kind of stuff they were proposing," Ishihara said in an interview with Nintendo Japan. "They turned Pikachu into something like a tiger with huge breasts. It looked like a character from the musical *Cats*. When I asked, 'How is this supposed to be Pikachu?' they said, 'Well, look, there's its tail right there.' … Seriously, that was the kind of stuff being proposed."

President of Nintendo of America Minoru Arakawa decided that the original art style would remain intact. At this point, the anime, movie, trading cards, and merchandise that was already successful in Japan had the original art style. "More important than the art style was making the series 'culturally neutral,' meaning that no matter who you were or where you played the games, you connected with it immediately. To an extent, Pokémon already is," wrote Dockery. "Pokémon's core ideology of friendship, adventure, and collecting monsters resonates with anyone willing to accept it."

With each new generation, Game Freak and Nintendo decide how to retain the core feeling of *Pokémon* without feeling like it is repeating the same thing over and over.

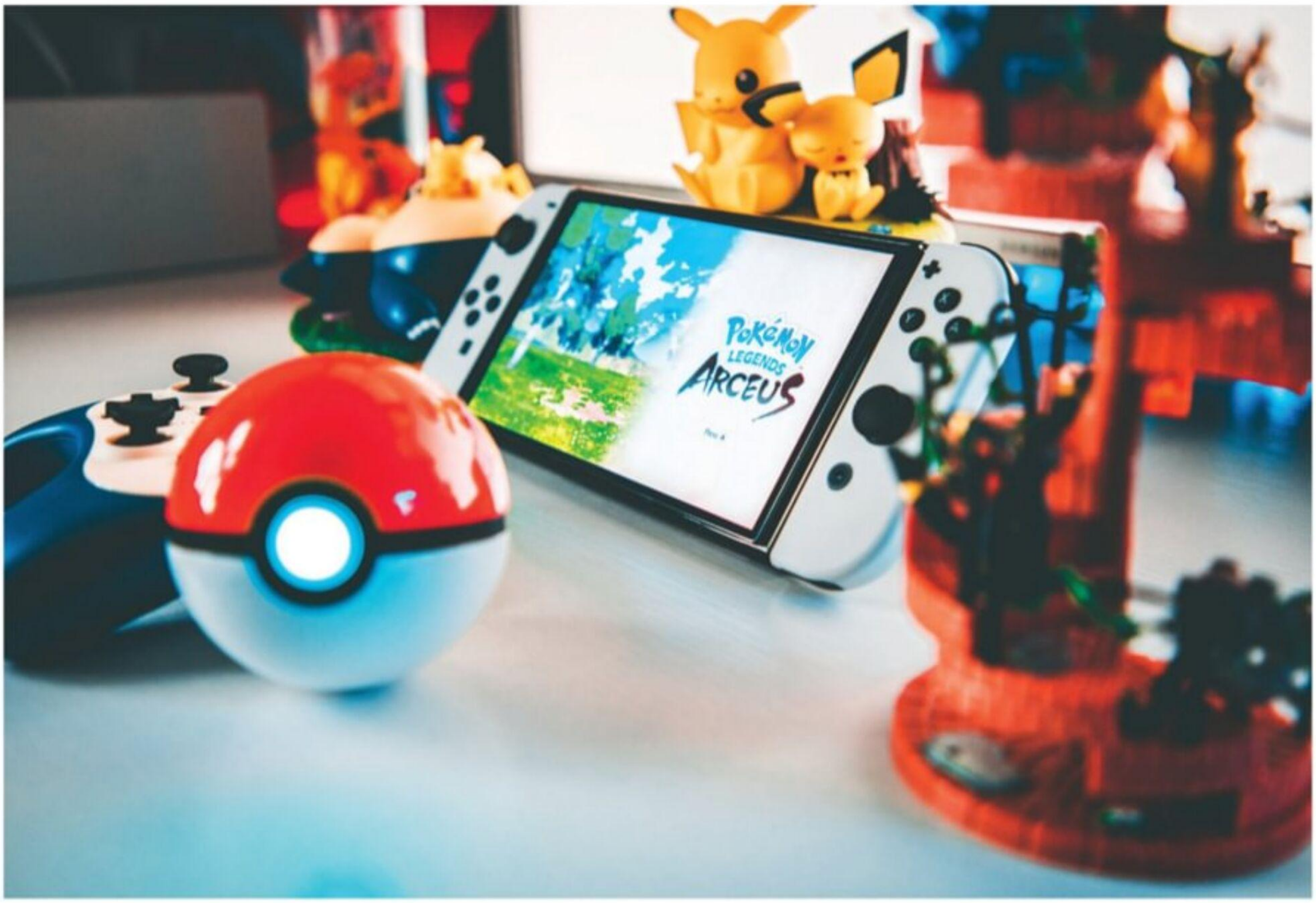
Still, the Japanese games needed to be translated into English, and the Japanese Pokémon names needed appropriate English counterparts. Bill Giese and Sara Bush (then Sara Osborne) were localizers who pitched ideas about what each of the 151 creatures should be called. "We had gotten info from Game Freak, and they'd tell us the genesis of these creatures and what they meant, and what they were inspired by," Giese told Dockery. The team worked to honor the origins of the monsters, and often that came down to "literally smashing two words together, writing on the wall, and trying to say it fast and going, 'Is that a word?'" Giese said. "Articuno, Zapdos, and Moltres. I remember those vividly because we were struggling with these legendary ones. And once I had in my head 'Uno, dos, tres,' I wrote it down on paper, and I just put three elements together. And I thought 'Oh my god, this might work!' Not because it was creative, but because it meant I had solved the problem and could now go home and have dinner."

The games would be renamed *Pokémon: Red Version* and *Pokémon: Blue Version,* keeping the monsters found in Japanese *Red* and *Green,* respectively. The decision to change the name and color was thanks to Hiro Nakamura, an integral member of the U.S. team for localizing the games. "It was his kind of experimenting with people and understanding that blue is the most popular color in America and that starting with *Red* and *Blue* would be better than starting with *Red* and *Green,*" Tilden said of Nakamura's work. "It wouldn't matter in the triangulation of water-fire-plant which two led."

The games placed Charizard, the final evolutionary stage of flame-tailed Charmander, on the cover of *Red,* and Blastoise, the tortoise-like behemoth and final evolutionary stage of turtle Squirtle, on the cover of *Blue*. "Kids would not only trade between themselves but instantly understand the inherent competition going on," Dockery wrote. "'Which one did you get? *Red* or *Blue*?' would be the prime opening line for elementary school cafeteria arguments for months and years to come."

"Gotta Catch 'Em All. Gotta Catch 'Em All." Anyone familiar with Pokémon will remember this phrase. "Invented for the English-language *Pokémon* debut, this phrase was eventually slapped onto nearly everything related to Pokémon outside of Japan and was repeated frequently during the *A Sneak Peek at Pokémon* promotional VHS tape," Dockery wrote.

Promotional tapes were mailed around the country to the Nintendo Power mailing list. According to Dockery, the sneak peek includes two adult narrators: One is a professor who explains what a Pikachu and Pokédex are and introduces Ash Ketchum, the game's main character. The other narrator is Ketchum's Aunt Hillary, who alternates between calling them "Poké-uh-min" or "Poké-aye-mon things" but is still very excited for her nephew's endeavors to catch them all. The tape promoted the video



The Pokémon franchise is always evolving. In 2022, Pokémon Legends Arceus *revealed an entirely new open-world format and, for the first time, dangerous encounters.*

games, the Pikachu virtual pet, and the trading card game—all planned to debut a few months after the games' release. "Then the sneak peek ends by telling viewers to keep an eye out for the 'PokéCars,' which would be driving around the country, showing off the anime and games and even handing out free Pokémon stuff to any fan who happened to be way too close to the street at the time," wrote Dockery.

According to *Brandweek* and *Advertising Age,* Nintendo of America spent more than $10 million to make *Pokémon* a success. And it was worth it. More than two decades after Pokémon landed in the U.S., some 480 million *Pokémon* video games have been sold worldwide. There are currently 122 known games, spanning the core series that evolved from *Red* and *Green* (*Blue* in the U.S.). The core games can be grouped into nine generations. The defining point of where a new generation begins is when a new core-series *Pokémon* game is released with a large set of new Pokémon in its Pokédex. There are currently more than a thousand creatures to collect and trade.

With each new generation, Game Freak and Nintendo decide how to retain the core feeling of *Pokémon* without feeling like it is repeating the same thing over and over again. Sometimes that means implementing new features or opening up the world for players to explore and interact with. "I think at the core of *Pokémon* [are] the Pokémon creatures themselves," Masuda said. "We really just put a lot of focus on making the Pokémon themselves behave within the context of the world in a believable way that makes them these appealing and desirable characters. As long as you have that, the player's going to want to go out and catch them."

Q+A

The Ultimate Game Freak

In 1999, TIME spoke with Pokémon creator Satoshi Tajiri at the Tokyo offices of his small company, Game Freak.

In Japan, Ash is known as Satoshi, a nod to series creator Tajiri (below).

AFTER FIRST COMING UP WITH the idea for *Pokémon* in 1990, Satoshi Tajiri labored for nearly six years over the original game. A person who usually shuns the limelight, Tajiri talked about his labor of love with TIME Tokyo bureau chief Tim Larimer and intern Takashi Yokota at the offices of his small company, Game Freak, in the city's Setagaya neighborhood, a youth-culture hub with several colleges and universities.

His company occupies two floors in a nondescript office building. Sandwiched between the Game Freak floors is a "cram school" for junior high school students who are taking extra paid-for lessons in hopes of improving their next entrance exam scores.

Tajiri had just finished work on the new series of *Pokémon* games for Nintendo's Game Boy, to be released in Japan on Nov. 20.

He looked tired. His eyes were bloodshot, there were dark circles under his eyes, and his hands and lips trembled while he spoke. He looked like he needed a good long sleep.

TIME: Are you okay? You look pretty tired.

TAJIRI: It's the way I work. I sleep 12 hours and then work 24 hours. I've worked those irregular hours for the past three years. It's better to stay up day and night to come up with ideas. I usually get inspiration for game de-

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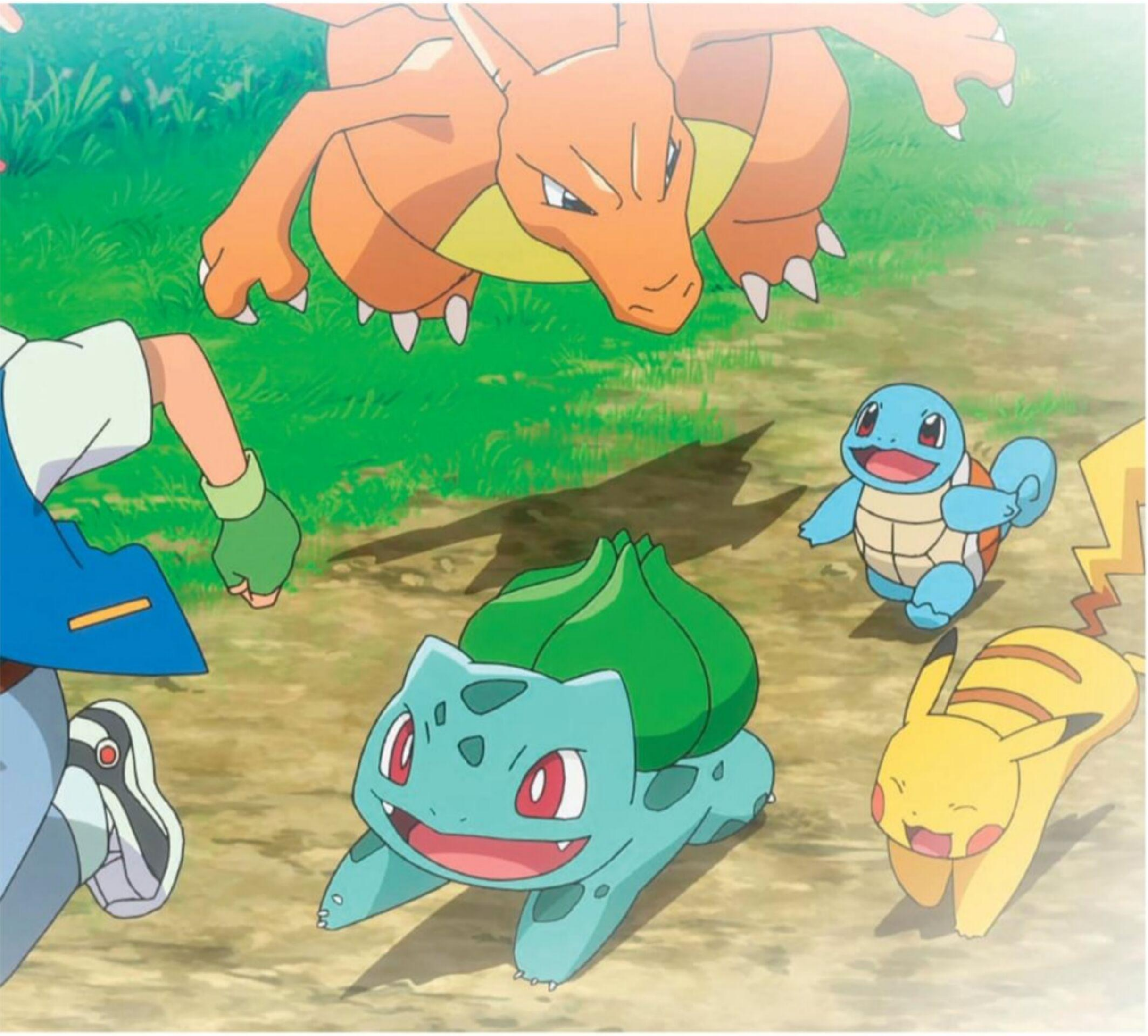


signing by working this schedule.

How did you get started designing games?
I'm part of the first generation who grew up with manga [comics] and anime [animation], you know, after Godzilla. I was absorbed with Ultraman on TV and in manga. The profession of game designer was created really recently. If it didn't exist, I'd probably be making anime.

We heard you were a *Space Invaders* junkie.
I was really into *Space Invaders* in about 1978. It got me more and more interested in video games. There wasn't any media to get information about games, so I came up with *Game Freak* magazine.

Weren't you just a teenager?
Yeah. It was handwritten. I stapled the pages together. It had techniques on how to win games, secret tips for games like *Donkey Kong*.

The biggest sales were for a special issue on the *Zabius* game. We sold 10,000 copies. It cost 300 yen each. So when I was 18 I already had a business going. At first I used a photocopy machine—more important than style was selling information. But when sales increased, it was difficult to do it by hand. So I took it to a printer.

How did you move from publishing to designing games?
Pretty soon I had some contributors, and we'd all get together and talk about games. The more I learned about games, the more frustrated I became because the games weren't very good. I could tell a good game from a bad game. My conclusion was: Let's make our own games.

What were you like as a kid?
The place where I grew up [in Machida, a western Tokyo suburb] was still rural back then. There were rice paddies, rivers, forests. It was full of nature. Then development started taking place, and as it grew, all the insects were driven away.

I was really interested in collecting insects. [Later, Tajiri's father tells us the other kids used to call Satoshi "Dr. Bug" as a child.] Every year they would cut down trees, and the population of insects would decrease. The change was so dramatic. A fishing pond would become an arcade center.

You liked bugs?
They fascinated me. For one thing, they kind of moved funny. They were odd. Every time I found a new insect, it was mysterious to me. And the more I searched for insects, the more I found. If I put my hand in the river, I would get a crayfish. If there was a stick over a hole, it would create an air bubble, and I'd find insects there. I usually took them home.

As I gathered more and more, I'd learn about them, like how some would feed on one another. So I stopped bringing them home. But I liked coming up with new ideas. Like how to catch beetles. In Japan, a lot of kids like to go out and catch beetles by putting honey on a piece of tree bark.

My idea was to put a stone under a tree, because they slept during the day and like sleeping under stones. So in the morning I'd go pick up the stone and find them. Tiny discoveries like that made me excited.

Did you have friends who collected insects?
Usually all the kids did it the same way, with the honey. None of my friends would do what I did. I got more insects than anyone.

So you were collecting Pokémon a long time ago! Did you make the insects fight against each other?
No, but sometimes they would eat each other.

Did you get the idea for *Pokémon* from these insects?
Yes. Places to catch insects are rare because of urbanization. Kids play inside their homes now, and a lot had forgotten about catching insects. So had I. When I was making games, something clicked, and I decided to make a game with that concept.

Everything I did as a kid is kind of rolled into one—that's what *Pokémon* is. Playing video games, watching TV, Ultraman with his capsule monsters—they all became ingredients for the game.

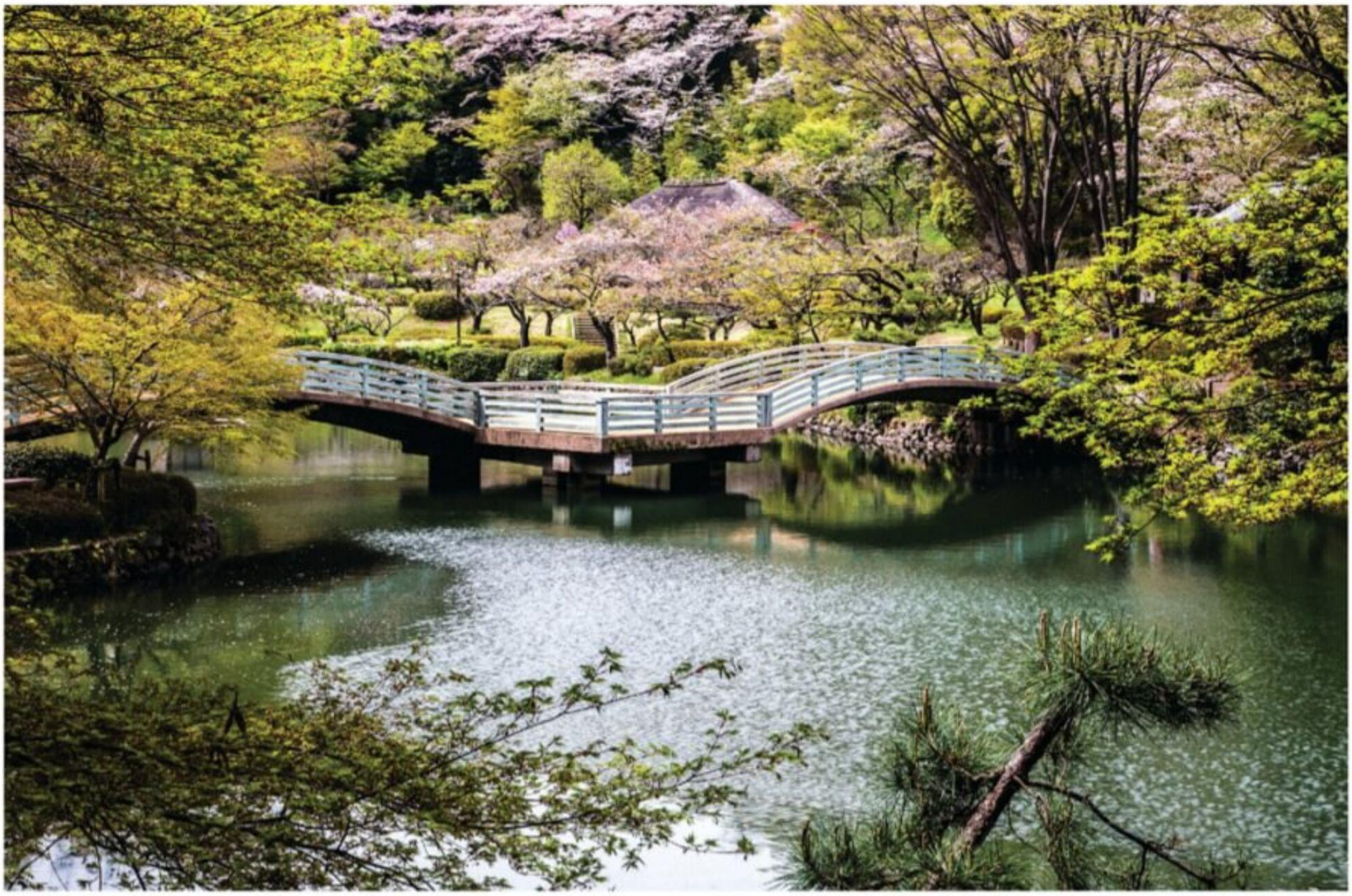
Why did it take so long to finish the game?
Well, the first game I did all by myself. That was before *Pokémon*. I didn't rely on other companies or programmers. I just started by taking apart the Nintendo system to see how it worked. When I was 16, I won a contest Sega was sponsoring for a game idea. It took me two years to learn the programming and a year to make my first game [called *Quinty*].

How did you get hooked up with Nintendo?
I saw Game Boy when it was first released. The idea for *Pokémon* clicked in my mind. The basic idea for *Pokémon* seemed a good fit for Game Boy.

Why did Game Boy seem right for *Pokémon*?
The communication aspect of Game Boy. It was a profound image to me. It has a communication cable. In *Tetris,* its first game, the cable transmitted information about moving blocks. That cable really got me interested. I thought of actual living organisms moving back and forth across the cable.

Wasn't the cable being used for players to compete with each other? In *Pokémon,* players are sharing, too, aren't they?
Yeah, everyone was using it to compete. The idea I had was for information to go back and forth. It wasn't about competition. Even before Game Boy, there was a communication capability at game arcades—like two race-car drivers sitting next to each other to compete. That's all anyone was doing, using it to compete.

But if you're not competing, games aren't all that much fun, are they?
I liked competition too. But I wanted to design a game that involved interactive communication. Re-



Now a more urban area, Machida was once a rural suburb of Tokyo. Catching bugs alongside streams and in lush forests inspired Tajiri to create the game.

member, there was no Internet then. The concept of the communication cable is really Japanese: one-on-one. It's like karate—two players compete, they bow to each other. It's the Japanese concept of respect.

Like the ritualistic elements of sumo?

A more casual form of sumo. Over the Internet, communication can be directed to anyone in the world, and it's anonymous. But with a communication cable, it's one-on-one, and the players pick who they play against. It doesn't really get aggressive. It's an intricate style of communication. Almost subtle.

How does that translate to the U.S.?

It's interesting, because in Japan, everybody goes for Pikachu. In the U.S., the characters Ash [Satoshi in Japan] and Pikachu are grouped together. American kids seem to like that.

In America there are more products sold with Ash and Pikachu together, not just Pikachu alone. I think Americans actually understand the concept of Pokémon better than the Japanese. The Japanese focus on Pikachu, but what I think is important is the human aspect—you need Ash.

Pikachu is sort of marginal in the game. But it's now the best-known character. How'd that happen?

When they did the anime, they wanted a specific character to focus on. Pikachu was relatively popular compared with the others, and potentially both boys and girls would like it. They heard a lot of opinions about this. It wasn't my idea.

Do you think the TV show now dictates how people play the game?

At first, I was a little concerned. It depends on how people are introduced to *Pokémon*. If they start with

the TV show, or with the cards, or the video game, they approach it differently each time.

Why is *Pokémon* still so popular?
When you're a kid and get your first bike, you want to go somewhere you've never been before. That's like *Pokémon*. Everybody shares the same experience, but everybody wants to take it someplace else. And you can do that.

Are all the goofy-sounding names important for *Pokémon*'s success?
What's more important is that the monsters are controllable by the players. It could be the monster within yourself, [representing] fear or anger, for example. And they are put in capsules. Plus, everybody can give them their own names. Pikachu is like the name of the species. But each player can name their own Pikachu. So kids can relate to it more. They get more attached to them that way.

Did you name all those beetles and spiders and bugs?
No. I had a cat, though. I wanted to name the frogs, because I watched them grow, but there were too many.

Are the Pokémon names related to those insects?
Yeah. Like Nyoromo [Poliwhorl in the U.S.]. It looks like a tadpole. There's little whirls on it because I remembered that when you pick up a tadpole, you can see its intestines because it's transparent.

Do the names mean anything, or are they just gibberish?
They all have meaning. Like Nyarth. It's from a Japanese proverb about a cat with money on his head that doesn't know it's there. It's about understanding the value of money. I don't think they have that concept in the U.S., so the name is different. And Pikachu. "Pika" is the sound Japanese say an electric spark makes. And "chu" is the sound a mouse makes. So Pikachu is like an electric mouse.

How do you know if one of them is with you or against you?
Think of it like this. If a horse runs over you and you die, then the horse is bad. But if you're riding the horse, the horse is your ally. So if you have a monster in your collection, then it's considered good. But if not, it's still not considered bad, because it could be your friend one day.

What's the story with Mew? Some kind of a secret character?
Yes, this was done on purpose. Mew was not originally included in the games for people to acquire. You had to get it from interacting with Game Freak or Nintendo. There were 150 characters, and Mew was number 151. You can't ever get a Mew without trading for it.

It created a myth about the game, that there was an invisible character out there. Someone gives me Mew, then I give Mew to you, then you pass it on. Introducing a new character like that created a lot of rumors and myths about the game. It kept the interest alive.

"There isn't much time for kids to relax. So I thought of games that could help kids fill in those five- or 10-minute gaps."

The main human guy is named Satoshi. That's your name. Is he your alter ego?
Basically, he's me when I was a kid.

His main rival is named Shigeru. That's the first name of Miyamoto, the famous game designer at Nintendo who did *Donkey Kong* and *Super Mario Bros.* Do you consider him your rival?
No! I really look up to Miyamoto-san. In the TV series, Shigeru is Satoshi's master. In the game, they are rivals. Shigeru is always a little bit ahead of Satoshi.

Does Satoshi ever catch up with Shigeru?
No! Never!

Have you caught up with Miyamoto-san?
I think very highly of him. I'd memorize each piece of advice he gave.

But *Pokémon* is more popular than anything Miyamoto-san has done. Hasn't the student passed the teacher?
No, because *Pokémon* was made with Miyamoto-

san's advice. Since I was a teenager playing *Donkey Kong*, he's always been my role model. He's a mentor for my heart.

Did the Nintendo people expect *Pokémon* to be such a big hit?
Not at first. They didn't expect much from the game. Game Boy's popularity was declining just when I finished the game and took it to Nintendo. I felt like a baseball player who slides into second base even though you know you're going to be out—but then it turns out you are safe.

You really thought Nintendo would reject it?
Always. I was told they couldn't really understand the concept of the game.

It seems like role-playing games are more popular in Japan than the U.S. Why?
Well, one reason is that back when we had arcade games only, they cost 100 yen for one game. I think in the U.S. it was always [much cheaper at] 25 cents.

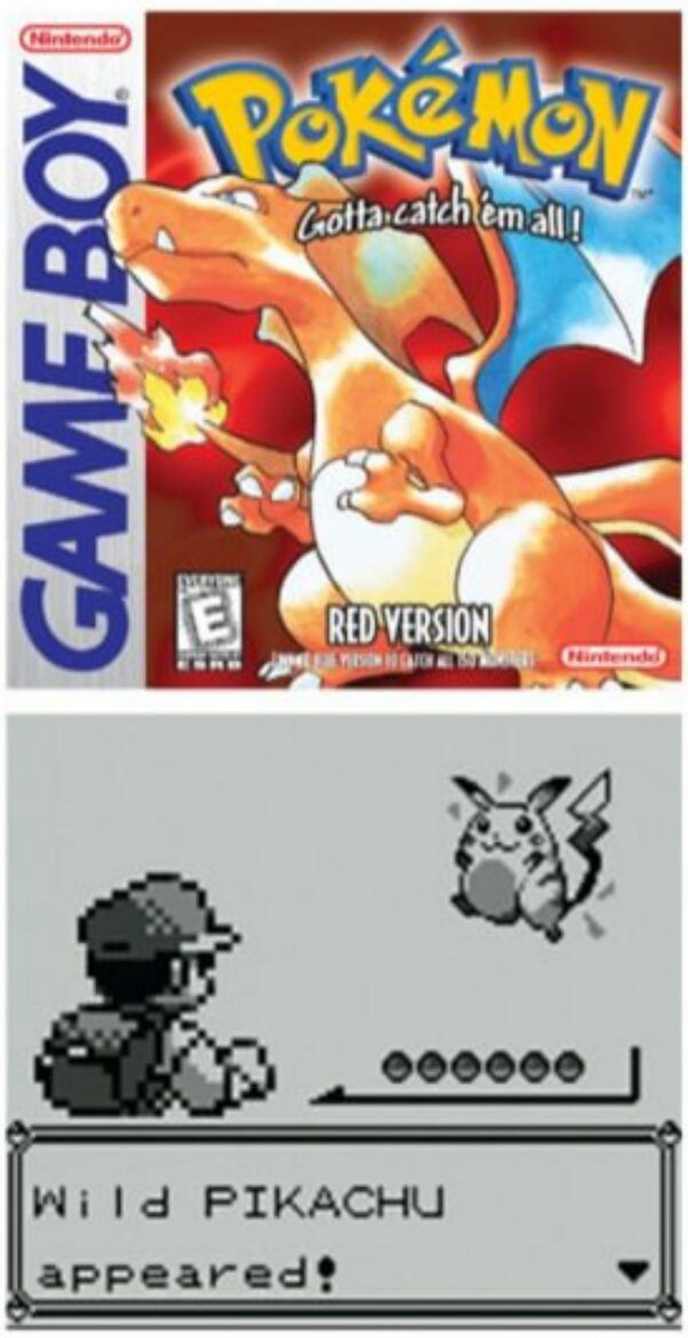
So 20 years ago we thought it was very expensive, but when role-playing games were introduced in Japan, it was revolutionary, because once you bought the software, no matter how many times you played, it was free.

A lot of people blame violence in video games for violent things young people do. Do you feel guilty about that?
In Japan, violence in games is pretty much self-regulated. In the 1980s, there was a game called *Bullfighter* where the matador stabbed the bull and red blood squirted out.

The day after it was released, they changed the blood to green. There's more violence in games in the U.S., in things like *Mortal Kombat,* where they rip out hearts and cut off heads. Japanese people wouldn't come up with ideas of blood splattering all over. Japanese focus more on the intricacies of the actions, the motion.

The TV people in the U.S. were worried about violence in *Pokémon.* Can you believe that?
I'm very careful about violence in games. I'm not interested in creating violent effects.

So Japanese game designers aren't making violent games?
No, they make them. But only to sell in the U.S.



Pikachu was not featured on the original cover art yet became a fan favorite and mascot for the brand.

Still, American kids like *Pokémon,* even without the blood.
I was really careful in making monsters faint rather than die. I think that young people playing games have an abnormal concept about dying.

They start to lose and say, "I'm dying." It's not right for kids to think about a concept of death that way. They need to treat death with more respect.

What do you think about that incident in Japan in 1997 when 700 kids had seizures watching bright lights?
When I was a kid, I was taught to sit far away from the TV. Then TVs got bigger. That was OK in the U.S., because you have big rooms.

But in Japan, the rooms are small. So people got in the habit of watching TV close to the screen.

Is it a good idea for kids to spend so much time playing *Pokémon*?
I think a lot about kids and what they need and want to make their lives better. You know, the cram school industry started when I was young. There was so little time to play. During school breaks, we'd run to the arcade to play games.

Right now, there isn't much time for kids to relax. So I thought of games that could help kids fill in those five- or 10-minute gaps.

When We Feared Pokémon

Can such cute critters be a bad influence? In 1999, TIME writers thought they might be.

BY HOWARD CHUA-EOAN AND TIM LARIMER

Holiday shoppers at Target reached for Pokémon *game pieces in November 1999.*

MONSTERS MAKE FOR DISQUIeting playmates. No matter how toylike and frivolous they may appear, they are unnatural and, in the end, deal in unresolved fear. But monsters also have a way with children. Consider the suspicious charms of the Pokémon creatures: Gengar, Cubone, and Chansey, for example. The first is a ghostly purple ball with a devilishly cute smile, horns to match, and a crocodile spine. The second is a sort of bear cub with a skull over its head—or is the whole thing its actual head? The third is a vaguely dinosauric, pinkish cloud. Their equally bizarre compatriots range in height from a foot (that would be a Pidgey) to 28 feet (that's an Onix) and in weight from 2 pounds (Diglett) to 1,914 pounds (Snorlax). Their fighting skills are as feral as ramming (that's Rhydon), as yucky as a tongue wrap (Lickitung—ugh!), or as childish as a tantrum (Primeape). There are more than 150 Pokémon species, and almost any child of 12 or younger, wired with a child's propensity for order, can recite a substantial lineup, complete with arcane attributes and individual monsters' ability to evolve into higher forms. Welcome to the new Mesozoic. The checkout line forms to the far right.

Parents who have had to suffer through the games, the TV series, and the shopping trips can take some comfort in the fact that the Pokémon demographic is the same one that has abandoned Teenage Mutant Ninja Turtles and Power Rangers. What may be harder to survive is the relentlessness of Pokémania, a multimedia and interactive barrage like no other before it, with children mesmerized into cataloging a menagerie of multiplicative monsters, with trading cards linked to games linked to television shows linked to toys linked to websites linked to candy linked back to where you started—a pestilential Ponzi scheme.

Smelling profits, America's conglomerates have Pokéyed up to cash in. Hasbro paid $325 million to market the toys. The WB network swept up exclusive rights to the top-rated animated TV series. War-

ner released the *Pokémon* movie, which saw thousands of children calling in sick from school with the "Pokémon flu" when it opened. Warner ran out of the trading cards it was giving away to ticket buyers. Meanwhile, Burger Kings in California and Texas had toy shortages for their Pokémon giveaways, leaving scores of children in tears.

The 4-to-12-year-old set can exhibit the most troubling fanaticism about Pokémon. Children have written hate email to movie critics who have panned the film. After a screening and being mesmerized by Pokémon battle after Pokémon battle, an excited little boy told his father, "That movie makes me want to fight." Not words parents want to hear.

The Pokémon trading card craze is at the center of much of the controversy. Colm McNiallais, 11, of New York City is a good guide to the frenzy. Passing kids looking to trade, he says, "We don't want them. They cheat." He gravitates toward others who have brought out binders filled with hundreds of cards. A dangerous thing, he says. Some of the stuff is rare, and who knows what other kids will do to get it? Colm has only the cards he is willing to trade. "Hey, you have a Magnemite!" someone squeals. "Oh, I need that Drowzee," says someone else. "Look at these holographic ones." The presence of a elusive Dragonite provokes gasps.

Some behavior has been delinquent. A 6-year-old logged on to a Pokémon website and printed counterfeit copies of the cards to trade with gullible schoolmates. Other behavior can be criminal. Last week a 9-year-old boy on Long Island stabbed an older schoolmate in a dispute over cards. A principal explained why her school, like many others, was banning Pokémon cards: "Children who don't have Pokémon cards feel left out. When children bring the cards into the lunchroom, they often spend time looking at the cards instead of eating lunch." A group of parents in New Jersey has sued the trading card manufacturer for intentionally making some cards scarce to force children into buying more and more packs of Pokémon cards. "Racketeering!" they cry.

It's not really the violence that scares parents—they've lived with and tolerated intimations of horror for generations. In *Grimm's Fairy Tales,* what does the wolf do to Red Riding Hood's granny or the witch plan to do to Hansel? When kids collect dinosaurs, parents, blinded by science, simply shrug when their children yell in the museum, "Look, mom, that allosaurus is eating the brachiosaur's baby!" After that, what can be objectionable about the too-cute-to-live Pokémon named Jigglypuff, a ball of fluff whose greatest power—not to be scoffed at—is a stupefying lullaby?

But there is a problem: The key principle of the Pokéocracy is acquisitiveness. The more Pokémon you have, the greater power you possess (the slogan is "Gotta Catch' Em All"). And never underestimate a child's ability to master the Pokéarcana required to accumulate such power; the ease with which they slip into cunning and thuggery can stun a mergers-and-acquisitions lawyer. Grown-ups aren't ready for their little innocents to be so precociously cutthroat. Is Pokémon payback for our get-rich-quick era—with our offspring led away like lemmings by Pied Poké-Pipers of greed? Or is there something inherent in childhood that Pokémania simply reflects?

The answer may lie in the origins of the phenomenon. Despite the publicity generated by the trad-

Released in November 1999, Pokémon Gold *and* Silver *introduced 100 new Pokémon for players to catch.*

ing cards, the heart of Pokémon is a handheld game. Start by picking up a palm-size Nintendo Game Boy, insert the proper cartridge, and switch it on. Soon, a creature with a lightning-bolt tail bounces through an animated sequence, pops a cute grin and yelps, "Pikachu!" You've met the most popular of the Pokémon, a creature part cherub and part thunder god.

Seven-year-olds navigate unerringly through the minuscule screen that is the porthole to Pokédom, punching two tiny buttons and a cross-shaped cursor bar to find their way. It's a more difficult task for adults. But if you choose to play, you assume the role of a Pokémon trainer. Your goal is to travel the world collecting one of every Pokémon species. To acquire that collection, you need Pokémon to subdue Pokémon (they are then stored in handy containers called Poké Balls, hence the etymology of *Pokémon,* short for Pocket Monsters). The battles are mediated by the electronics of the Game Boy. But don't worry: Pokémon do not die. When they lose battles, they faint. And if that happens to your Pokémon, you can take it to the local Pokémon Center, a high-tech spa where it can be restored to "fighting fit."

There are 151 Pokémon scattered among three existing versions of the game: *Pokémon Red, Pokémon Blue* and *Pokémon Yellow.* You have to trade between versions (via a cable linking Game Boys) to complete the collection. Thus the quest for all Pokémon grows as the product line expands with new species. *Pokémon Gold* and *Pokémon Silver* will become available in the U.S. next year, with the promise of 260 species.

There is a limit to the role playing. You can't really choose your identity: You are a 10-year-old boy. You can pick any name when you assume the role of the child, but one selection is volunteered: Ash, the name of the hero in the *Pokémon* TV series. He walks down from his room and, seeing his mother (a father is nowhere to be found), tells her he is departing on a quest. She replies, "Right. All boys leave home someday."

Nintendo released the game but did not expect much from it. However, while the big electronic companies were giving up on Game Boy, Japanese boys were not. For them, the games in the old technology were still affordable; the flashier and high-tech new models were out of reach. Masakazu Kubo's publishing company Shogakukan Inc. did the math and decided to back Pokémon, coming out with a line of comic books that included the first trading cards as giveaways. While best-selling games like *Final Fantasy* grabbed the top slot for a couple of dramatic months and then faded, *Pokémon* sales grew slowly and steadily—and did not stop.

With a hit on its hands, Nintendo decided to animate the game. The show, produced in anime style, quickly became the top-rated children's TV series in Japan, appealing to both girls and boys. Then came an unpleasant surprise. In December 1997, about 700 children had sudden and simultaneous seizures while watching the show. The specific episode involved a bomb attack on Pikachu and its pals. In a microsecond, animated flashes interacted with frenetically changing colors as Pikachu blinked out its lightning bolts across the screen. Apparently, such combinations of light can induce seizures in some children. While the government investigated, the show shut down for four months, and the produc-

ers revised their animation strategies.

The Pikachu crisis stirred a huge amount of attention and publicity, but the wrong kind. At that time, Satoshi Tajiri's Game Freak and Kubo's publishing company were negotiating with skeptical executives at Nintendo of America about introducing Pokémon to the U.S. "Cartoon Monster Attacks Kids" was the first headline Americans read about *Pokémon*. It was not a good omen. There were others, however.

"Quite honestly, role-playing games, particularly for the Game Boy system, were never popular in the U.S.," says Gail Tilden, vice president of product acquisition and development at Nintendo of America. "We had a real concern that the role-playing nature of the game would be a hard sell for us."

"The negotiations were not easy," says Kubo, who calls Tilden "the Dragon Mother of Nintendo." He explains, "She is a mother, and at first she didn't understand when we said *Pokémon* is good for children. In the end, though, it was good for us that a mother was in charge." Tilden says the seizures caused by the show concerned her, but "we knew it was isolated to that one episode." She adds, "It did not deter us from being excited. We were committed to taking a run at it."

Thus, in the U.S., Nintendo had all the Pokémon pieces to play with—a fully extended product line of games, toys, comic books, and cards to appeal to boys and girls ages 4 to 15. Says Tilden: "We decided to make an all-out effort to repeat the phenomenon in the Western world." An additional part of the strategy, says Kubo, was to hide its "Japan-ness." Nintendo of America and its Japanese partners brought in Al Kahn, who developed the Cabbage Patch doll, to help with toy merchandising. "There's a little bit of magic in what Nintendo does," says Sussane Daniels, president of entertainment at the WB. "We wouldn't interfere with their methods. God bless them." But Nintendo did ask for changes to be made to the original Japanese show (which now has 130 episodes). "We tried not to have violence or sexual discrimination or religious scenes in the U.S.," says Kubo. Some graphic scenes involving punching were taken out. The names of the characters and monsters were Westernized: Satoshi became Ash, and Shigeru became Gary. And the Pokémon were given cleverly descriptive names. For example, of the three more popular Pokémon, Hitokage, a salamander with a ball of fire on its tail, became Charmander; Fushigidane, a dinosaur with a green garlic bulb on its back, became Bulbasaur; and Zenigame, a turtle who squirts water, became Squirtle. Others winked at familiar pop images: The martial-arts Pokémon Hitmonchan and Hitmonlee are tributes to Jackie Chan and Bruce Lee.

The more Pokémon you have, the greater power you possess. And never underestimate a child's ability to master the Pokéarcana to accumulate such power.

And, once again, the Pokémon swept a nation. "We've never seen anything like it," says Tilden. The products plugged into every kiddie angle: Toys appeal to younger kids, who then move on to the cards and graduate to the various levels of video games. The TV show propagandizes each new creature with a tutorial called "Who's that Pokémon?" Most of the Pokémon growl their names repeatedly ("Squirtle, Squirtle, Squirtle"), so the children learn who's who quickly. The craze is also online-friendly: The most popular website for kids 12 years and younger is currently Pokémon.com. It's all Pokémon, all the time. At least until the next craze.

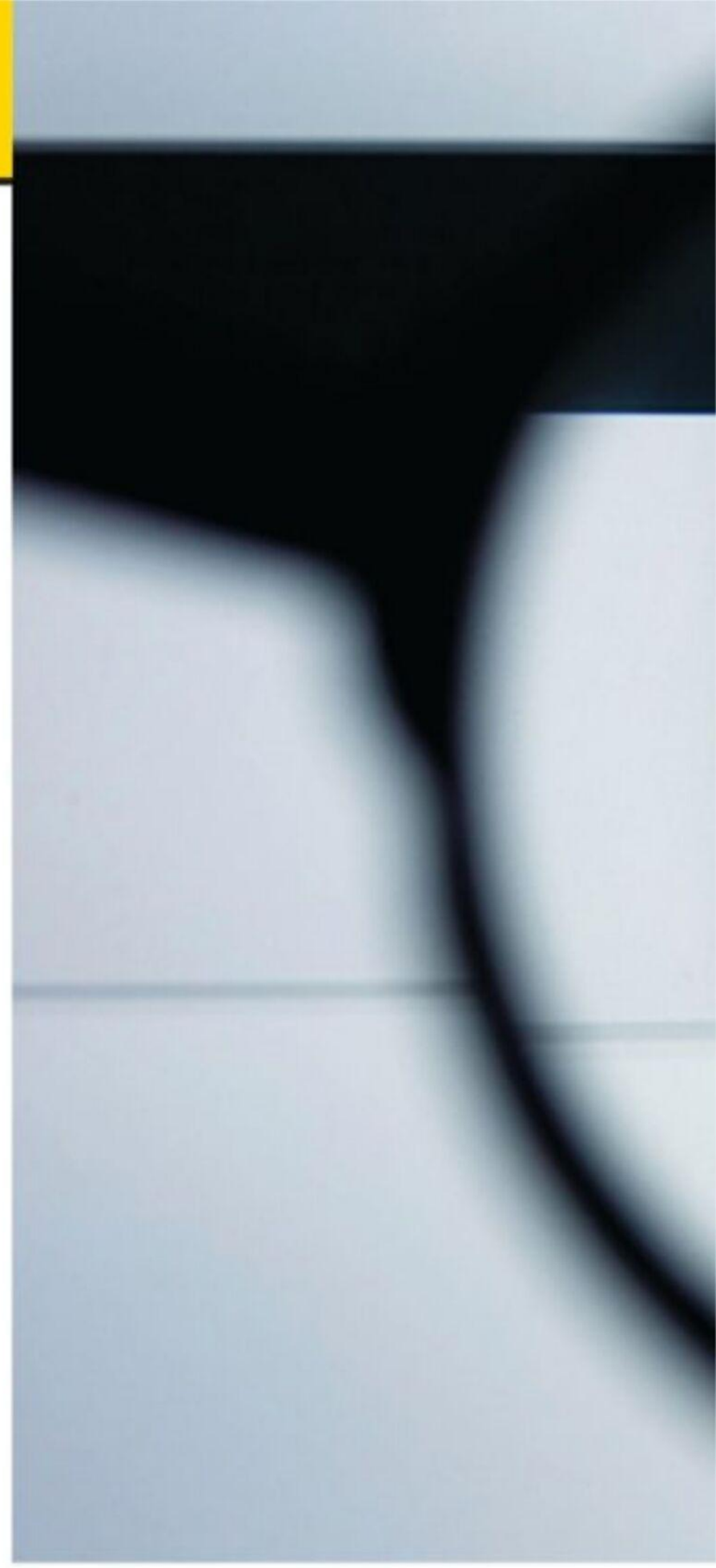
Yet collecting Pokémon and pitting them against one another is not a new kind of quest, simply one tweaked with technology. In Asia, fathers and grandfathers still tell of growing up in the midst of World War II, of nights of not knowing what to do with yourself except sneak into the tall grass of the countryside to catch crickets and take them home, cupped in your hand, to raise in the dark of matchboxes, training the insects for fights with the cricketts of other boys who had been on the same nocturnal hunt. The more experience each cricket had, the better a fighter it became—the tiny surrogate for the boy unable to fight in the war going on all around him. *Pokémon* is that kind of game. Except that there are many kinds of crickets, and all are potentially friendly monsters with fabulous powers. And nobody dies.

—With reporting by Lisa McLaughlin/New York and Sachiko Sakamaki and Hiroko Tashiro/Tokyo

The Origins of the Word *Pokémon*

The combination of Japanese and English created a term that made its way into the dictionary.

BY KATY STEINMETZ



IF A BEWILDERED CONSUMER turned to an online dictionary before 2016, hoping to make some sense out of all this Pokémon business that had dominated news cycles for decades, they likely would have been greeted with a correction. Did you mean *pikeman,* a soldier armed with a pike? Or perhaps *putamen,* the shell membrane? After *Pokémon GO* drove headlines, however, a new set of results promised clarity on Dictionary.com.

The editors said that the timing was a coincidence. This trademark just happened to be in their definition queue right as a viral mobile game by that name took the world by poké-storm. But it was dovetailing with a "surge in lookups" that they were seeing and is timely evidence that this Japanese-spawned term has become an English word in its own right—even though it was kind of English to begin with.

The name of Nintendo's lucrative franchise was created through a process known as *wasei eigo.* That phrase, says language writer John Kelly, literally means "Japan-made English" and refers to the process of Japanese speakers taking "English nuts and bolts" and "assembling them into new Japanese words." In rare cases, if the term proves popular or useful enough, it gets borrowed back by English speakers.

In a common version of this process, Japanese speakers start with English words—in this case, the raw materials were *pocket* and *monster*—and then "transmogrify" them so they sound like a more typical Japanese phrase and describe a novel concept, Kelly says. The words get spelled out in a Japanese writing system used for foreign words, called *katakana,* so academics call this step "katakanization."

Launching his game in the mid '90s, developer Satoshi Tajiri took the first syllables of each of those katakanized words—*poketto monsutā*—and mashed them together. Hence the three-syllable word in the title of the most popular mobile game in U.S. history. English becomes Japanese becomes portmanteau becomes English.

Kelly, who specializes in writing about etymology, points to other examples of words that went through the *wasei eigo* machine and ended up back in English dictionaries. There's salary man, a term for a white-collar businessman that was invented by the Japanese; they pronounced it *sarari-man* before English speakers re-Anglicized it. Another example is cosplay — the practice of dressing up as a character from a film, book, or video game. Japanese speakers turned the words costume and play into *kosupure,* which became cosplay when English speakers welcomed their root words back in a new form.

Perhaps the best known example is *karaoke.* Its root, explains Nagoya University's

Nathan Hopson, are the Japanese word for empty (*kara*) and the katakanized word for "orchestra" (*ōkesutora*). As he has written, the popularity of that word in English and around the world is a testament to "the ways in which language becomes globalized in thickly tangled webs of exchange."

Other examples that never got taken up in America: *romansu guru* (romance + gray), a Japanese word for a middle-aged lover. There is *wan patān* (one + pattern), an adjective that describes "that which is overdone." Though academics have outlined competing theories about what exactly is going on when Japanese speakers coin new words based on foreign ones, Kelly emphasizes that it is not a "poor attempt" at English. "It's not trying to do a one-to-one translation," he says. "It's making something wholly new."

Showing up in a dictionary isn't an absolute testament to whether a foreign-derived word is part of standard English, though it's evidence you would use to make a case if you were, say, playing high-level Scrabble. Beyond that, there is other evidence that Pokémon has taken on a life of its own on this side of the Pacific.

People are breaking it apart and forming new words, like pokémania, to describe the widespread, wild adoption of *Pokémon GO.* As a presidential candidate, Hillary Clinton "verbed" the title of the game, punnily saying she wished she could figure out how to get voters to "Pokémon GO to the polls!" And while in Japanese, *pokémon* would be the singular and plural form, English speakers are describing the pet monsters as "pokémons," the way they say and write "emojis," which itself comes from the Japanese words for picture (*e-*) and character (*moji*).

For his part, Kelly believes that a foreign word becomes an English one when lots of people are "using it very naturally and smoothly across a variety of contexts." That uptake often happens more quickly when the word fills a specific role, giving people a term that describes something no other string of letters can. And whether you're obsessed with them or desperately tired of hearing about them, those pet monsters go by no other name.

"It's like karaoke on steroids!" Hopson says of Pokémon. "Two English words, katakana-ized, chopped in half, glued together, and then shipped back out to take over the world."

The Game, the Shows, the Movies

Few franchises publish quite as often as Pokémon. This year-by-year road map tracks the many entries.

BY COURTNEY MIFSUD INTREGLIA

START

1996 1997 1998 1999

THE ORIGINALS

Pocket Monsters Red and *Green*, the first-ever *Pokémon* games and primary games of Generation I, released in Japan for the Game Boy; *Pocket Monsters Blue* released in Japan; Pokémon Trading Card Game (TCG) released

THE ANIME

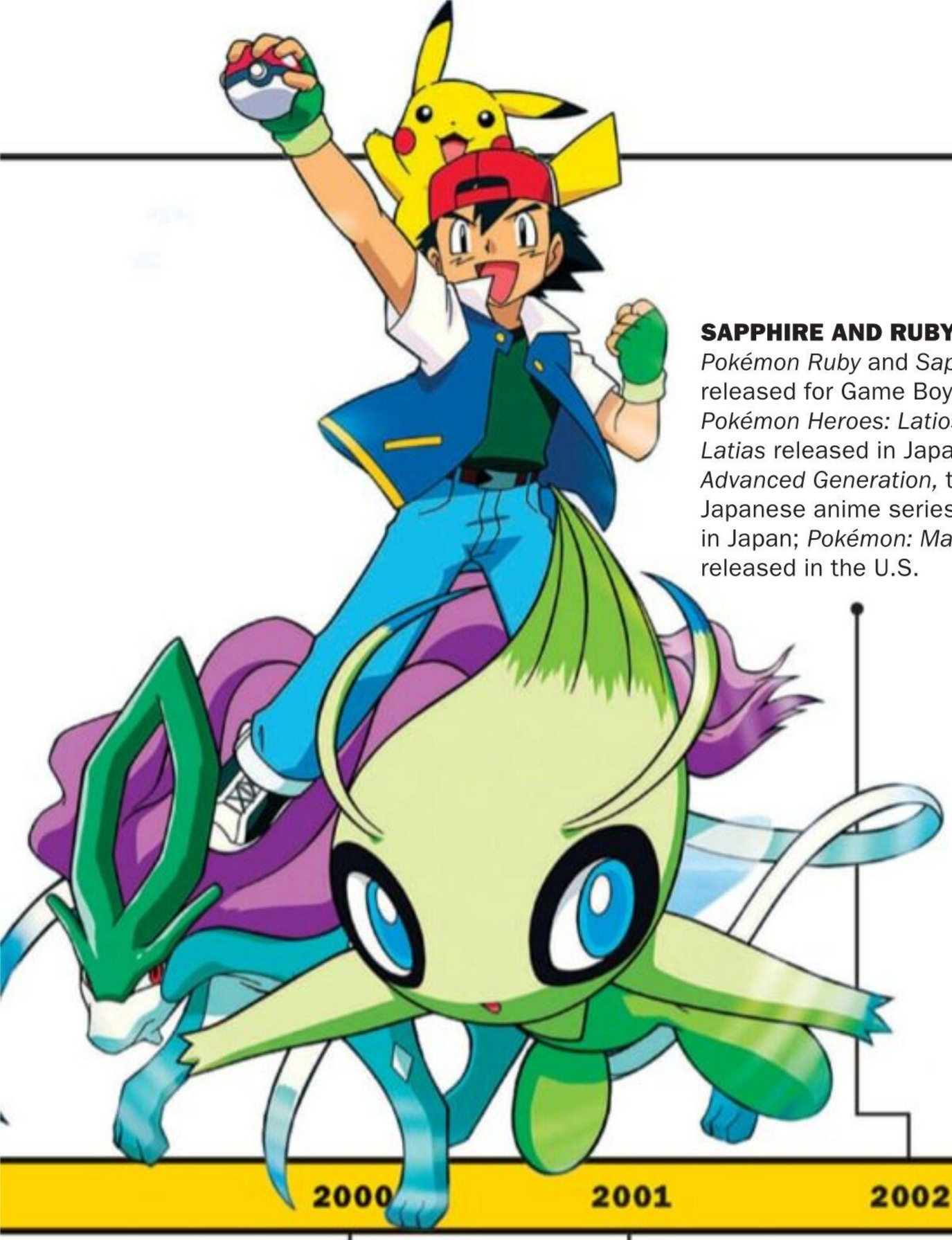
Pokémon Adventures manga released in Japan; *Pocket Monsters: Original Series,* the first Japanese anime series, first aired in Japan with the release of the first episode of the first season, *Pokémon, I Choose You!*

GOLD AND SILVER

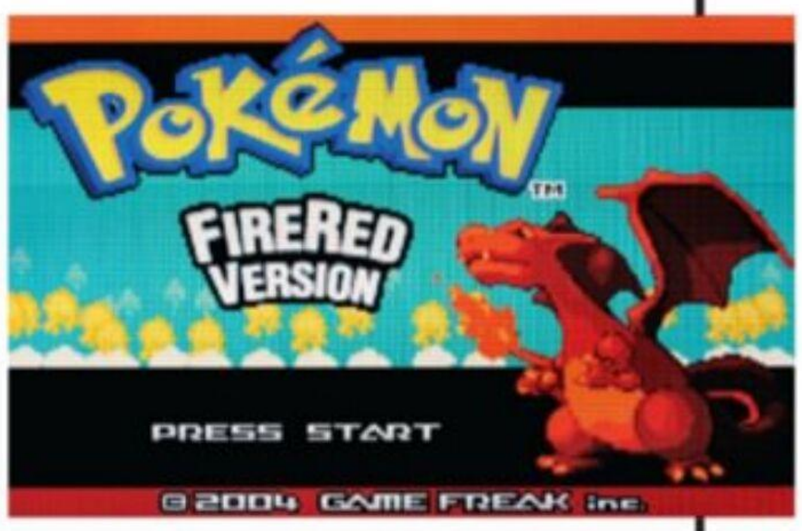
Pokémon Snap, a spinoff photography game, released in Japan; *Gold* and *Silver* released in Japan for Gameboy Color; *Pokémon The First Movie* launched in the U.S; *Pokémon The Movie 2000: The Power of One* released in Japan; *Pokémon Stadium* (known in Japan as *Pokémon Stadium 2*), a spinoff battle game, released in Japan

COMING TO AMERICA

First-ever Pokémon Center, Pokémon Center Tokyo, opened in Tokyo; *Pokémon The First Movie: Mewtwo Strikes Back* released in Japan; first English-dub anime season, *Pokémon: Indigo League,* released in North America; *Pokémon Red* and *Blue* released in North America; *Hey You, Pikachu!,* a spinoff game, released in Japan for Nintendo 64

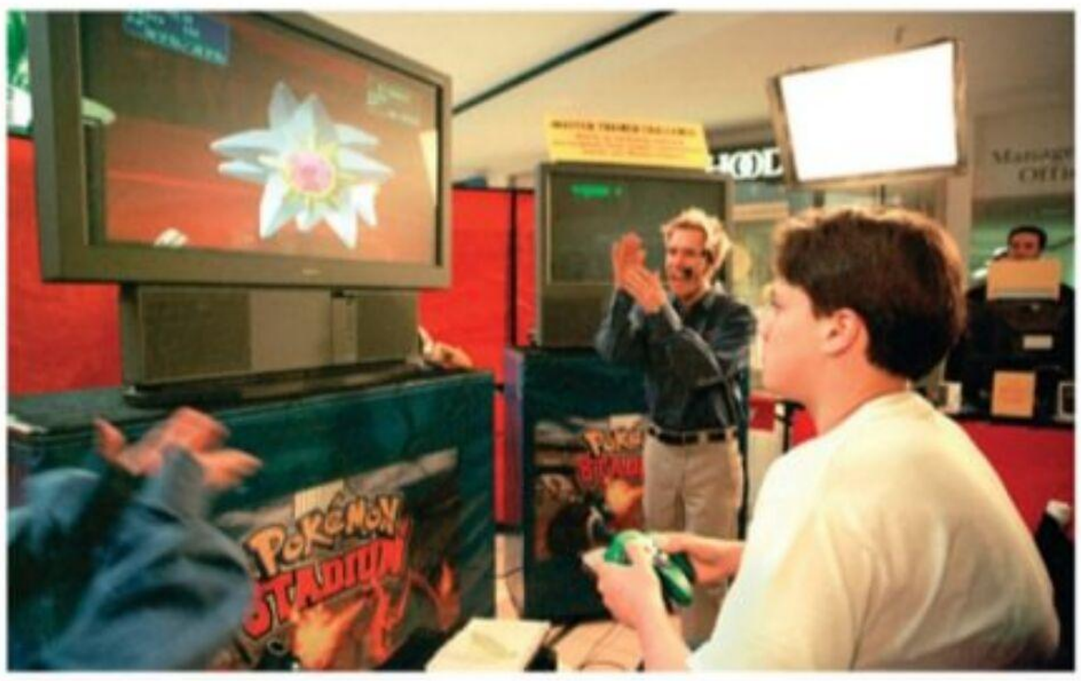


SAPPHIRE AND RUBY
Pokémon Ruby and *Sapphire* released for Game Boy Advance; *Pokémon Heroes: Latios and Latias* released in Japan; *Pokémon Advanced Generation,* the second Japanese anime series, released in Japan; *Pokémon: Master Quest* released in the U.S.



REMAKING ORIGINALS
Pokémon FireRed and *LeafGreen,* the first-ever remakes, released in Japan for Game Boy Advance; seventh Pokémon movie, *Destiny Deoxys,* released in Japan; *Pokémon Emerald* and final main games for Game Boy Advance released in Japan

2000 2001 2002 2003 2004



STADIUM SHOWDOWN
Pokémon 3: The Movie: Spell of the Unown released in Japan; *Pokémon: The Johto Journeys* released in the U.S.; *Pokémon Crystal,* the final main game for Game Boy Color, released in Japan; *Pokémon Stadium 2* released in Japan

STARRING CELEBI
Pokémon 4Ever Celebi: Voice of the Forest released in Japan; *Pokémon: Johto League Champions* released in the U.S.; Pokemon Center New York opens in New York City; Pokémon Puzzle Collection released in Japan

COLOSSEUM CLASH
Jirachi Wish Maker released in Japan; *Pokémon Colosseum* released for GameCube

SPINOFF MYSTERY
Lucario and the Mystery of Mew released in Japan; *Pokémon Mystery Dungeon: Blue Rescue Team* and *Red Rescue Team,* first games in the spinoff *Mystery Dungeon* series, released in Japan for Nintendo DS and Game Boy Advance, respectively; *Pokémon: Advanced Battle* released in the U.S.

READY TO RUMBLE
Platinum, upper edition of *Pokémon Diamond* and *Pearl* (2006), released in Japan for the Nintendo DS; *Giratina and the Sky Warrior,* second movie in the *Diamond and Pearl* trilogy, released in Japan; *Pokémon Rumble,* a spinoff game, released for the Wii; *Pokémon: Diamond* and *Pearl: Battle Dimension* released in the U.S.

2005 **2006** **2007** **2008** **2009**

DIAMOND FRONTIER
Pokémon Diamond and *Pearl* released in Japan for the Nintendo DS; *Pokémon the Series: Diamond and Pearl* premieres in Japan; *Pokémon Battle Revolution,* a spinoff game, released in Japan for the Wii; *Pokémon: Battle Frontier* released in the U.S.

A DECADE OF ANIME
The Rise of Darkrai, first movie in the *Diamond and Pearl* trilogy, released in Japan; *Pokémon Mystery Dungeon: Explorers of Time and Explorers of Darkness,* a spinoff game, released in Japan for the Nintendo DS; 10th anniversary of the *Pokémon* anime

ARCEUS ARRIVES
Pokémon HeartGold and *SoulSilver,* remakes of *Pokémon Gold* and *Silver* (1999) for Game Boy Color, released in Japan for the Nintendo DS; *Arceus and the Jewel of Life,* third movie in the *Diamond and Pearl* trilogy, released in Japan; *PokéPark Wii: Pikachu's Adventure,* a spinoff game, released in Japan for the Wii

POKÉDEX RELEASES
Pokémon the Movie: Black—Victini and Reshiram and *White—Victini and Zekrom,* the first dual Pokémon movies, first released in Japan; *PokéPark 2: Wonders Beyond* released in Japan for the Wii; *Pokédex 3D* released for Nintendo 3DS

BANKING POKÉMON
Pokémon X and *Pokémon Y* released worldwide for Nintendo 3DS; *Pokémon the Series: XY (2013–2016)* premieres; *Genesect and the Legend Awakened* released in Japan; *Pokémon Bank* released for Nintendo 3DS

2010 2011 2012 2013 2014

BLACK AND WHITE
Zoroark: Master of Illusions, released in Japan; *Pokémon Black* and *Pokémon White* released for the Nintendo DS system; *Pokémon the Series: Black and White* premieres

SEQUEL TIME
Pokémon Black 2 and *White 2,* sequels to *Pokémon Black* and *White* (2010), first-ever sequel games and final main games for Nintendo DS, released; *Pokémon Conquest,* a spinoff game, released in Japan for Nintendo DS; *Kyurem vs. the Sword of Justice* released in Japan; *Pokémon Mystery Dungeon Gates to Infinity,* a spinoff game, released in Japan for Nintendo 3DS

ALPHA AND OMEGA
Pokémon Omega Ruby and *Alpha Sapphire,* remakes of *Pokémon Ruby* and *Sapphire* (2002) for Game Boy Advance, released worldwide for Nintendo 3DS on the 12th anniversary of *Pokémon Ruby* and *Sapphire*; 17th *Pokémon* movie, *Diancie and the Cocoon of Destruction,* released in Japan

THE GO REVOLUTION
Pocket Monsters Red, Green, Blue (1996), and *Yellow* (1998), originally released for Game Boy, rereleased worldwide for Nintendo 3DS via Nintendo 3DS Virtual Console; *Pokkén Tournament* released worldwide for the Wii U; *Volcanion and the Mechanical Marvel* released in Japan; *Pokémon Sun* and *Moon* released for Nintendo 3DS; *Pokémon the Series: Sun and Moon (2016–2019)*; *Pokémon GO* available on iOS and Android devices

ULTRA RELEASES
Pokémon Ultra Sun and *Ultra Moon,* upper editions of *Pokémon Sun* and *Moon* (2016), released worldwide for Nintendo 3DS; 20th Pokémon movie, *I Choose You!,* the first alternate-timeline movie, released in Japan; *Pokken Tournament DX* released worldwide for Nintendo Switch

2015 2016 2017 2018 2019

HOWDY HOOPA
Eighteenth Pokémon movie, *Hoopa and the Clash of Ages,* released in Japan; *Pokémon Super Mystery Dungeon,* a spinoff game in the *Mystery Dungeon* series, released in Japan for Nintendo 3DS; *Pokémon XYZ,* a subseries of *Pokémon XY* Japanese anime series, airs in Japan

LET'S GO, POKÉMON
Pokémon: Let's GO, Pikachu! and *Pokémon: Let's GO, Eevee!* for Nintendo Switch launched; *Detective Pikachu* spinoff game released for Nintendo 3DS; *The Power of Us* released in Japan; *Pokémon Crystal (2000),* originally released for Game Boy Color, rereleased worldwide for Nintendo 3DS

SOLVING POKÉCRIMES
Detective Pikachu premieres in Japan with international release the following week; *Pokémon Sword* and *Pokémon Shield* released for Nintendo Switch; *Pokémon Journeys: The Series* premieres; *Mewtwo Strikes Back: EVOLUTION,* remake of the first *Pokémon* movie and first CGI, released in Japan; *Pokémon Masters* (called *Pokémon Masters Ex* since August 2020) mobile spinoff game released

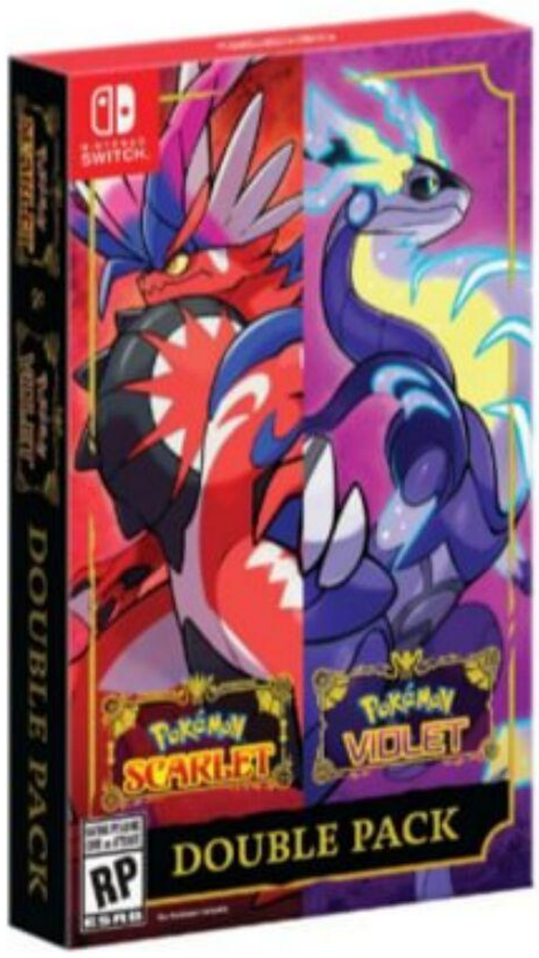
A NEW LOOK
The Isle of Armor and *The Crown Tundra, Sword and Shield* DLCs (downloadable content) released for Nintendo Switch; *Pokémon HOME* released; *Mewtwo Strikes Back: EVOLUTION,* the 22nd Pokémon movie, released worldwide on Netflix; *Secrets of the Jungle* released in Japan; *Pokémon Café Mix,* a spinoff mobile game, released worldwide

PALDEAN STORIES
The Teal Mask and *The Indigo Disk* released as DLCs for *Scarlet* and *Violet*; *Pokémon Horizons: The Series* released; *Detective Pikachu Returns* released; *Pokémon: Paldean Winds* airs on Pokémon's YouTube channel; *Pocket Monsters: Liko and Roy's Departure* airs in Japan

2020 2021 2022 2023 2024

REMAKE RELEASES
New Pokémon Snap, a spinoff game, released worldwide for Nintendo Switch; *Pokémon Unite,* a spinoff MOBA mobile game, released for Nintendo Switch; *Pokémon Brilliant Diamond* and *Shining Pearl,* remakes of *Pokémon Diamond* and *Pearl,* released for Nintendo Switch; Netflix release of *Pokémon Master Journeys: The Series* in the U.S.

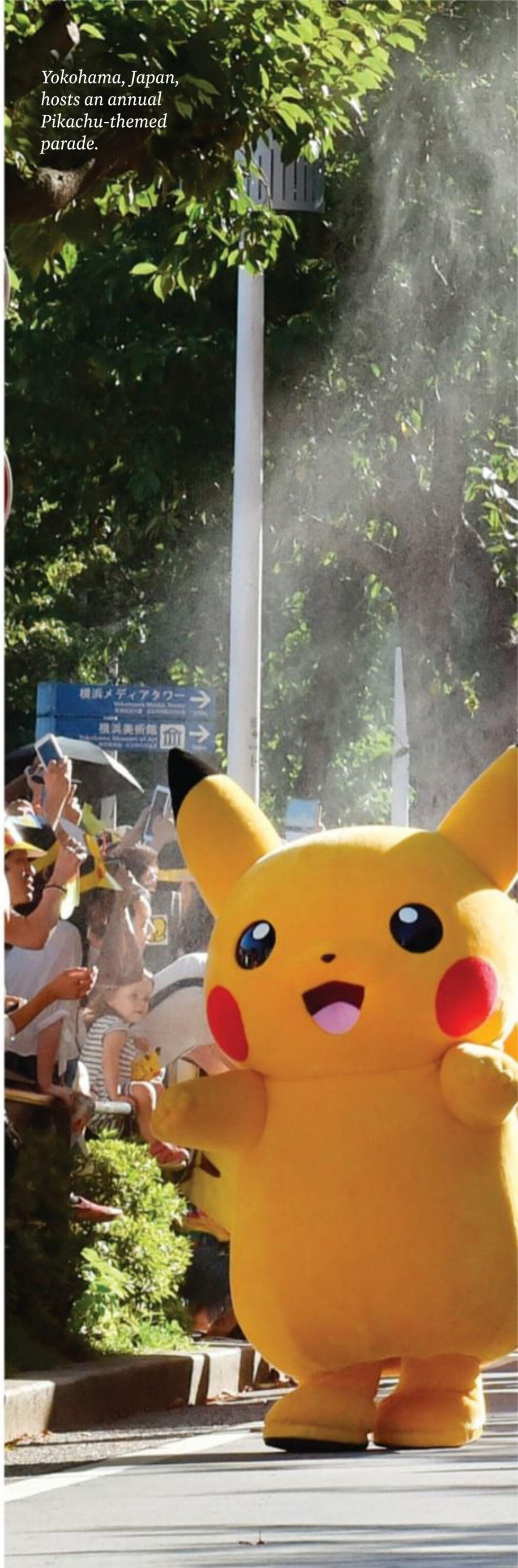
SCARLET AND VIOLET
Pokémon Legends: Arceus, prequel to *Pokémon Diamond* and *Pearl,* released worldwide for Nintendo Switch; *Pocket Monsters: Aim to Be a Pokémon Master* anime airs in Japan; *Pokémon Scarlet* and *Violet* released worldwide for Nintendo Switch



Why We Love Pikachu

He comes in many forms, he transcends generations, and for a mouse, he's pretty cute. What's not to love?

BY LISA EADICICCO



Yokohama, Japan, hosts an annual Pikachu-themed parade.

NO ONE DRAWS A CROWD QUITE like Pikachu. That became evident when throngs of fans and scalpers descended upon the Van Gogh Museum in Amsterdam last year seeking a special-edition Pikachu card portraying the beloved Pokémon in the style of Van Gogh's famous 1887 painting *Self-Portrait with Grey Felt Hat*. Demand for the collectible caused such a frenzy that the museum had to end the promotion after fans shoved their way through the gift shop, as seen in social media videos. The card is now fetching high prices on eBay, with bids ranging up to $800.

That a cartoon character could cause such a commotion is telling of Pikachu's status as a pop culture icon, and the Van Gogh Museum is just one example. McDonald's has given away Pikachu-themed game coins and cards with Happy Meals. A Pikachu balloon is featured annually in the Macy's Thanksgiving Day Parade after first appearing more than 20 years

ago. The character clearly holds a special place in our hearts, even 25 years after the electric-yellow mouse made its debut on American television.

Pokémon transcends generations in a way that most franchises don't. If you were a child in the late 1990s, there was a good chance that you collected Pokémon cards, watched the show, or played the popular Game Boy games. Maybe you did all three. Parents probably remember buying those cards and waiting in line when the first *Pokémon* movie hit theaters. And today, adults still dress up as Pikachu for Halloween and clamor to catch the endearing yet powerful electric creature in *Pokémon* games.

The franchise encompasses more than 1,000 creatures and encourages players to catch them all. So why are we all so drawn to Pikachu? The easy answer is that the creature is adorable in all of the ways a children's cartoon character should be. Pikachu, with its puffy crimson cheeks and lightning-bolt tail, is universally adored. It omits mewling coos of its own name, which sound baby-like. But Pikachu's charm is about more than cuteness: Pikachu is a well-written character that embodies traits like courage and companionship, but not without vulnerabilities and shortcomings. It's a lovable TV persona, but also a strong teammate and asset in the games, which makes it unlike any other Pokémon character. "[Pikachu] is a toy you can buy and trade and collect," says Jinying Li, an assistant professor of modern culture and media at Brown University. "But it's not just a thing. It's a companion. It's a friend."

Pikachu was designed to bring more balance to the Pokémon universe. Pokémon were initially made to be tough-looking, since battling is the main focus of the *Pokémon* games, Ken Sugimori, who oversaw the character design for the first two *Pokémon* games at Japanese game developer Game Freak, said in an interview published on the Pokémon website in 2018. Sugimori thought the world of Pokémon could use some cute characters to encourage other aspects of the game beyond battling, so he brought on illustrator Atsuko Nishida to help. "To bolster the concept that you don't just battle Pokémon but collect and trade them as well, we had to make trading Pokémon more interesting," Sugimori said in the interview.

Koji Nishino, who was responsible for creating area maps and managing the appearance rate of Pokémon in the first two games, kept pushing for Pikachu to be even cuter during the design process. Nishino was so fond of Pikachu that he made it hard to find in the games by hiding it in the Viridian Forest, a mazelike wooded area that players encounter in the beginning of *Pokémon Red* and *Blue*. "In truth, I just loved Pikachu so much, I didn't want players to find it easily," he said in the interview.

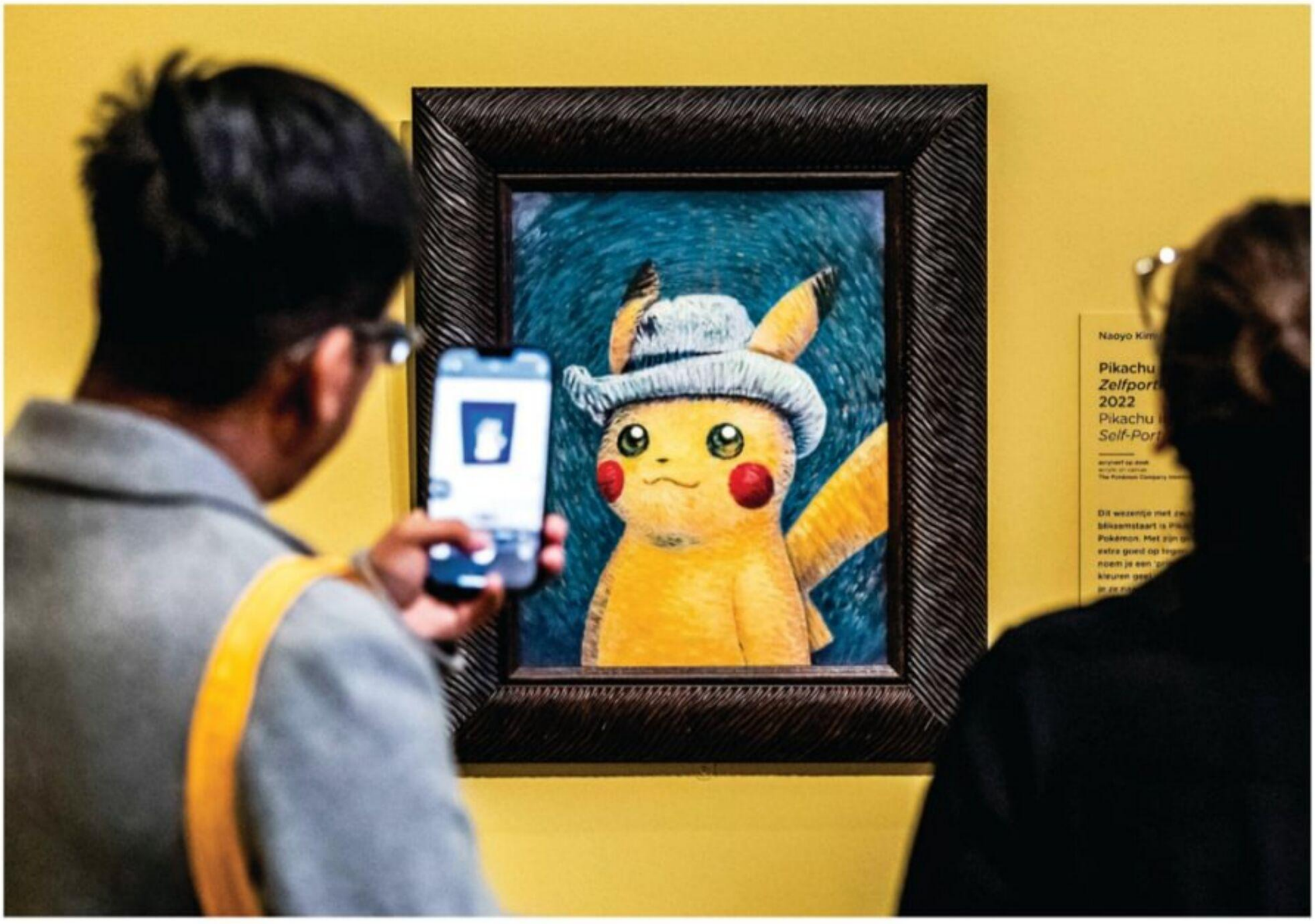
Pikachu's color could also be part of why it's so lovable. Northrop Davis, author of the book *Manga and Anime Go to Hollywood* and a professor at the University of South Carolina's School of Visual Art and Design, points out that yellow is a popular color in children's characters, from Winnie the Pooh to Big Bird to Spongebob. In a 2017 interview with CNN, Leatrice Eiseman, executive director of the Pantone Color Institute, said her research indicated the color yellow is often associated with words like sunshine, cheer, warmth, happiness, and playfulness.

The color yellow is often associated with words like sunshine, cheer, warmth, happiness, and playfulness.

"There's a softness to Pikachu," says Susan Napier, a professor of rhetoric and Japanese at Tufts University who specializes in the history and theory of Japanese animation. "Pikachu is part of this very interesting and also adventurous world, but it's also fundamentally very reassuring."

It's not surprising that a Pokémon Center brimming with almost every Pokémon plush you can imagine can be found in the bustling Shibuya district of Tokyo. And the city's Chuo City area is home to a Pokémon-themed cafe offering concoctions like a Pikachu and Bulbasaur curry plate and Pikachu soufflé pancakes.

Cuteness is a core part of the cultural zeitgeist in Japan. It extends beyond TV and movies and is woven into popular fashion, toys, and accessories. Japan's *kawaii* culture, the term that is broadly used to describe characters and merchandise that are bubbly, cute, and colorful, is even reflected in corporate culture.



Inspired by Vincent Van Gogh's Self-Portrait with Grey Felt Hat, *Naoyo Kimura's Pika-themed version was on display at the Van Gogh Museum until January 2024.*

And no place embodies kawaii culture like Tokyo's famous Takeshita Street, located in the shopping and fashion mecca of Harajuku. On this narrow strip you'll find boutiques flaunting funky offbeat garb in their windows, snack stands selling rainbow-colored sweets, and souvenir shops with oversize stuffed animals.

Long before Pikachu arrived, the Hello Kitty craze kicked off in the 1970s and boomed in the '90s, setting a precedent for Pikachu and other cute characters to become cultural icons. "Pikachu is in a way more accessible than Hello Kitty, because Kitty comes across as pretty female, whereas Pikachu is kind of gender-free," says Napier. The Pokédex, a database featured in the show and games that stores information on every Pokémon, indicates that there are both male and female versions of Pikachu. But Pikachu is often portrayed the same way regardless, barring certain exceptions, like an episode of the TV show in season 21 when Ash and his gang stumble upon a gaggle of female Pikachu with stylish bangs and rounded tails.

Pikachu's cute look, flashy battle moves, and low appearance rate in the early games had already made it popular among Pokémon fans. The character's starring role as Ash Ketchum's sidekick in the animated series, which debuted in Japan in 1997, made it the face of the franchise.

Given the video game's success, some fans might wonder why Pikachu was selected to be Ash's main companion rather than Charmander, Squirtle, or Bulbasaur, the three options players have to choose from in the beginning of *Pokémon Red* and *Pokémon Blue*, the signature games of the franchise. Series director Kunihiko Yuyama didn't want to highlight one starter Pokémon over the others by giving it a more prominent role in the show, Sugimori said in the 2018 Pokémon interview. Making Charmander the star of the series could have potentially alienated kids who had picked Squirtle as their own partner in the game, for example. Ash, given his determination to "catch 'em all" and become the very best Pokémon trainer, would quickly come to train all three starters. But Pikachu was always his closest ally.

The show was significant for more than raising Pikachu's profile. It expanded Pikachu's character, giving it a level of depth that couldn't be communicated in the video games alone. In the show and movies we learn about Pikachu's stubborn side, see it cry, and uncover the unique oddities of its character. Pikachu's quirks (its love of ketchup, for instance) and weaknesses (the difficult fight with Lieutenant Surge's Raichu in episode 14) come to life in the show.

Davis, who in his classes analyzes the traits that make for a compelling character, points to several of these characteristics when explaining what makes Pikachu so appealing. Pikachu is passionate, courageous, and willing to help his friends, as we experience in the series through Pikachu's relentless loyalty to Ash and willingness to take risks for his comrades. All of this makes Pikachu more relatable and interesting to audiences. "It humanizes them and makes them three-dimensional rather than flat personalities," Davis says.

PERHAPS ONE OF THE BEST EXAMPLES OF Pikachu's character—and also one of the show's most memorable moments—occurs in episode 39, when Ash tries to leave Pikachu in the forest with a bunch of wild Pikachu. Ash believes Pikachu would be happier among its own kind and tries to do what is best, even at his own expense. But Pikachu chooses to remain with Ash, illustrating how important Pikachu's friendship is to the show's narrative.

Pikachu's talents are also better visualized in the show. Seeing moves like Thunder Shock and Electro Ball in action on the big screen is way more impactful than viewing them on a pocket-size Game Boy. As such, the TV series influenced the character's design, since Pikachu's movements were much different in the show compared with the game. In the show, Pikachu not only battles and tackles enemies but also perches on Ash's shoulder, naps in the grass, and dances and cheers with friends. "While Pikachu was originally very short and stout, we gradually gave it a more defined neck and elongated its spine," Sugimori said in the 2018 Pokémon interview. Nishida described Pikachu's initial design as "dumpling-shaped."

The show hit American airwaves in September 1998 and became the top-rated kids' show in the country a year later. The first *Pokémon* movie, which arrived in theaters in November 1999, earned $10.1 million on its opening day. And Pikachu starred in its own game, which would be the first of several. *Pokémon Yellow Special Pikachu Edition* debuted in October 1999 in the U.S. and sold more than a million copies in its first two weeks.

The choices made in adapting the games into the anime pushed Pokémon to become a pop culture mainstay. Pokémon's prevalence across multiple media made it resonate on a broader level than other iconic anime franchises, such as One Piece, the long-running pirate-themed anime and manga series that got a live-action adaptation on Netflix in 2023. "It had such a giant worldwide impact," says Davis. "You could say One Piece would be at the center of the market in Japan, but somehow Pokémon became the center of anime and games in the world."

Pikachu also ages with its audience in a way that most cartoon characters haven't. A lot of that has to do with the way Pokémon has expanded and evolved over the last decade, dominating the smartphones in our pockets and the Nintendo Switch consoles in our living rooms. Those who grew up watching the show were likely in their 20s or 30s when the smartphone-based augmented reality game *Pokémon GO* arrived in 2016.

Pokémon GO proved that the franchise could appeal to audiences beyond video game lovers and children. Unlike most video games, it encouraged players to scour the real world, rather than the virtual one, for Pokémon. In other words, Pokémon gave its audience a reason to stay interested well beyond their childhood. It's the reason why adults flocked to theaters to see the 2019 film *Detective Pikachu,* in which Ryan Reynolds voiced the namesake creature.

Nintendo reported in 2017 that the ratio of players in their 20s and 30s had grown for *Pokémon Sun* and *Moon,* which were the newest titles at the time, compared with the previous games.

And Pikachu is still at the center of it all. Seven years after *Pokémon GO*'s release, Pikachu is surfacing in the game in new and surprising ways. A rare special detective edition of Pikachu was available in October 2023 as part of a promotion for the video game *Detective Pikachu Returns.* Pikachu was also a big part of the 2023 Pokémon GO Fest, an in-person event at which trainers from all over the world gathered to catch Pokémon and participate in events. Festivals were held in New York, London, and Japan in 2023, with versions of Pikachu in special crowns among the most coveted catches of the two-day period.

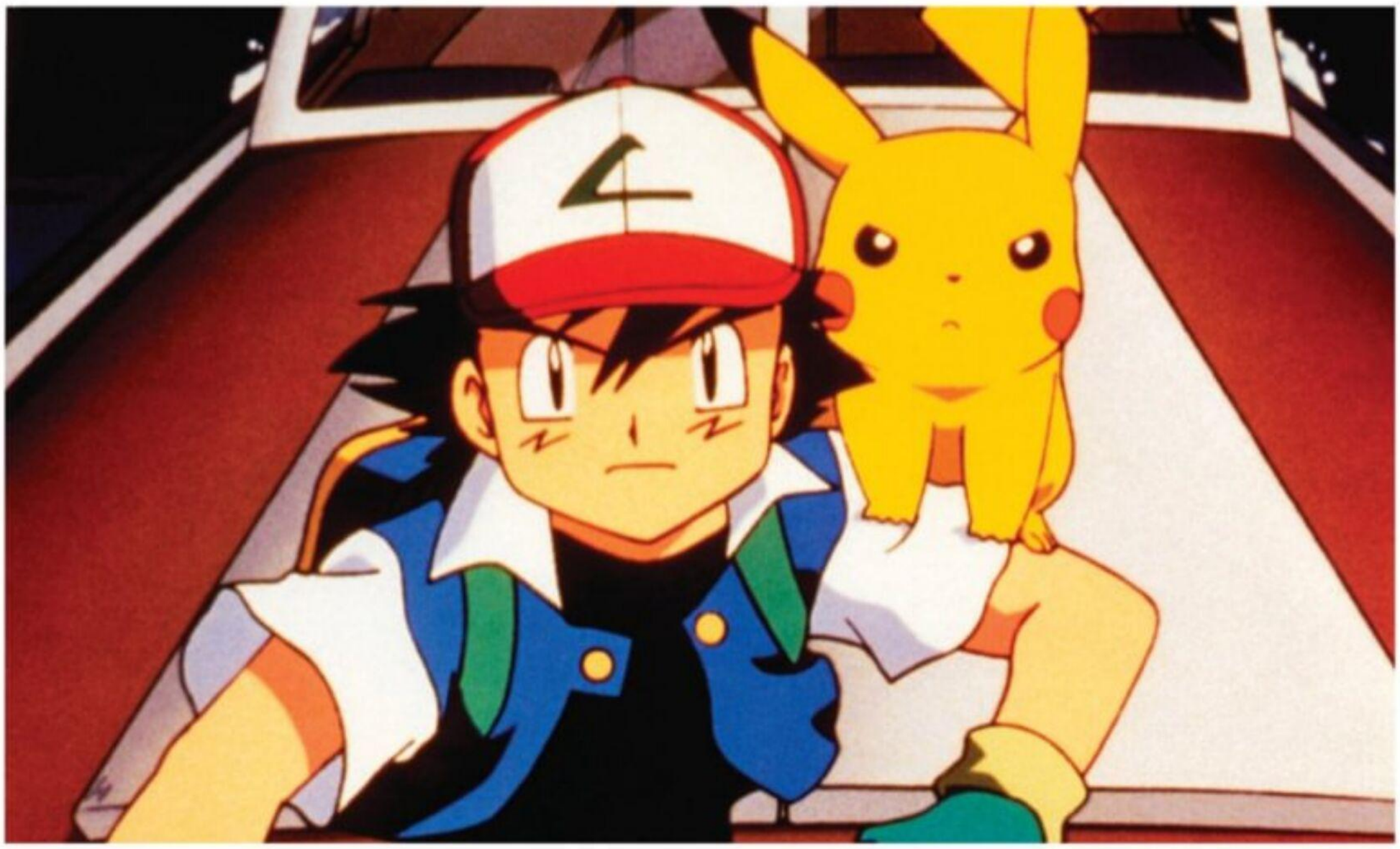
Pikachu is about more than the character; it embodies the larger theme of friendship and companionship that's present throughout the series, providing a window into the Pokémon universe. And that "universe" aspect has been critical to Pokémon's success. Li, the Brown University professor, describes Pokémon as the pinnacle of what is known as the media mix model, a media format that's particularly popular in Japan, which entails building an entertainment franchise that extends across multiple media types. "There are two elements: the character and the world," Li says. "The two need to work together. We have Pikachu as a character, but the character is an anchor point into a bigger world, a bigger universe."

From its adorable squeaks to its warm personality and enviable battle moves, there's a lot that makes Pikachu special. But perhaps simplicity is Pikachu's best attribute. While the character has taken many forms over the years, donning detective gear, a chef's uniform, and other funky costumes, it's still the same lovable electric-yellow mouse.

Pokémon predates the smartphone and existed long before game systems gained the advanced technological capabilities of today's consoles. In the 2018 Pokémon website interview, Sugimori wondered whether Pikachu would exist the way it does if it had been created today. Above all else, it's the bubbly, warm way Pikachu makes its fans feel that matters most.

"I think characters play the role of consoling those who have been through hardship," Sugimori said. "And I hope Pokémon can play that role as well."

Opposite: Koji Nishino, illustrator Atsuko Nishida (behind Pikachu), and Ken Sugimori.
Below: Pikachu's popularity soared to new heights with the Pokémon's portrayal in the anime.



2

Monster Business

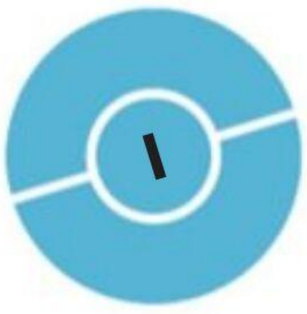
Lucrative licensing deals, massive Pokémon stores, and competitive collecting of trading cards have led to some serious Pokédollars.

Shibuya's Pokémon Center is one of 18 active centers where customers can buy exclusive merchandise.

Investing in Trading Cards

Buying and selling Pokémon cards can be risky business, but some have made serious dough. Experts weigh in on do's and don'ts of monetizing the trading card game.

BY BILL SYKEN



IF YOU'VE BEEN CONSIDERING getting into the buying and selling of Pokémon cards, maybe the first thing to understand is that this is not the most sober of investment communities. Consider that the most expensive card ever was bought by wrestler/YouTube star Logan Paul, who celebrated his acquisition by wearing that card—a rare 1998 Pikachu illustrator card that had been graded at a perfect 10 by Professional Sports Authenticators (PSA)—on a chain around his neck as he made his ring entrance at WrestleMania in 2022. He had bought the card for $5.275 million: $4 million in cash plus trading in a Grade 9 version of the same card valued at $1.275 million.

In short, especially at its top end, the Pokémon card market can be a little wild. But it has a measured and sophisticated side as well. Go to a website like TCGFish.com and you can research cards the same way you would stocks, with charts tracking sales figures over a period of years and by grade level, along with a host of other data. Yes, Charizard 1999 Base Set #4 has a total market cap—and it's $22.4 million.

It's all quite dizzying, so let's step back for a minute and set the scene from the beginning. This market springs from the release of the *Pokémon Trading Card* game, which debuted in Japan in 1996 and in the United States two years later. The cards were designed for play but also, like baseball cards decades before them, to catch the interest of collectors. There are a lot of cards out there—the U.S. version of the game has nearly 100 card sets issued, with the total for individual cards creeping up toward 10,000. The Japanese editions of the cards are nearly as numerous.

The buying and selling of Pokémon trading cards gained a new intensity during the pandemic, when people were at home, rediscovering their collections, and also hungry for something to do. Look at the sales histories for cards over the past five

Basic Pokémon
Pikachu
50 HP
Mouse Pokémon. Length: 1' 4", Weight: 13 lbs.
Spark If your opponent has any Benched Pokémon, choose 1 of them and this attack does 10 damage to it. (Don't apply Weakness and Resistance for Benched Pokémon.)
20
weakness
resistance
retreat cost
When several of these Pokémon gather, their electricity can build and cause lightning storms. LV. 14 #23

Evolves from Caterpie
Metapod
70 HP
Cocoon Pokémon. Length: 2' 4", Weight: 22 lbs.
Stiffen Flip a coin. If heads, prevent all damage done to Metapod during your opponent's next turn. (Any other effects of attacks still happen.)
Stun Spore Flip a coin. If heads, the Defending Pokémon is now Paralyzed.
20
weakness
resistance
retreat cost
It is vulnerable to attack because its shell is soft, exposing its weak and tender body. LV. 31 #11

years, and most of them follow the same pattern: a massive spike in late 2020 followed by a steep fall, eventually finding a level that is still higher than the pre-pandemic price.

Considering how much there is for a collector to keep track of, it's easy to understand why Pokémon trading card expert Scott Pratte says the person most likely to do well as an investor is a true fan. "It's something you have to genuinely enjoy," he says. "If you don't, you're always going to be one step behind the market. When a card or category shifts in value, you won't understand why."

Pratte, who hosts a popular YouTube show under the name smpratte, also runs an eBay site with 16,000 card sales. His most expensive listing is a $4 million Pikachu graded at PSA9 that he bought 12 years ago at an undisclosed price.

Traditional auction sites like eBay host a robust Pokémon card trade. But if you want a taste of the edgier side of the business, head to Whatnot, a live auction site where visitors can pop into thousands of Pokémon livestreams going on all at once and participate in card auctions, some of which are as short as five seconds. Or you can buy into what are known as "box breaks," where you purchase a share of a card pack that is opened live on camera. Whatnot is a place not only to buy and sell cards but also get dopamine rushes and instant online community.

Whatnot launched in December 2019, four months before the COVID-19 lockdown, and Pokémon cards were the second specialized category the site featured, after Funko dolls. While the site has expanded into many other categories, Eric Shemtov, Whatnot's GM of cards, says Pokémon is still a mainstay. "We average selling a card every second," he says.

Whatnot also provided the backdrop for the cautionary tale of Blake Martinez. The former NFL linebacker made headlines in 2022 when he left football to sell Pokémon cards through a company he started called Blake's Breaks, and he claimed $11.5 million revenue in under a year. It was a sensational story that opened eyes to how much money there was to be made in this world. "I loved football. But what I found out was I loved building and running my own team even more," Martinez told the *Athletic* in July 2023. But his story took a dark turn when Whatnot decided to ban Blake's Breaks from its site in August 2023 following its investigation into a series of accusations that the company was rigging auctions and not always fulfilling orders. Martinez returned to the NFL in November 2023.

Shemtov, while not getting into the details of the Martinez case, says Whatnot understands its business won't thrive if it is not perceived as credible, and so it takes steps such as requiring live interviews for new card sellers and guaranteeing box break purchases by value—if you buy into a box break and score a valuable card, and then the seller never sends it to you, Whatnot will reimburse you for the value of the card, not simply your buy-in.

Still, Pratte prefers the traditional marketplace of eBay. "I think the Blake Maritnez story captures Whatnot as a whole," he says. "It's a way to make money, but there's a sleazy shadow to it."

The Martinez case is far from the only example of malfeasance in the Pokémon market. YouTube host Rattle Pokemon is devoted entirely to exposing scammers (he has a multipart series on Martinez), and the mere fact that he has more than 2,400 videos about shady sellers is daunting. The most high-profile Pokémon scam involved our old friend Logan Paul. He bought a sealed case of unopened cards that turned out to be fake, with the boxes that

Players can collect cards and battle others. Rare and valuable ones have lured investors such as Logan Paul (opposite, flaunting his around his neck).

were marked Pokémon on the outside actually full of packs of G.I. Joe cards. A silver lining for Paul: His YouTube video "I Lost $3,500,000 on Fake Pokemon Cards" has 7.5 million views.

Between the potential for scams and the volatility of card prices, Pratte offers this advice for someone getting into the market: "Don't spend what you're not willing to lose."

That said, and taking all the warnings into account, there are people who make card investing work for them. Here's some tactical advice on how to approach it from Ryan Majeske, the author of *Pokémon Cards: The Unofficial Ultimate Collectors Guide.* His first piece of counsel is this: Sealed packs are the blue-chip purchase for the long-term investor.

"By far, the most profitable and lucrative way to invest in Pokémon cards is to collect sealed products," Majeske says. "In my 20-plus years collecting, there hasn't been a sealed product that is worth less than MSRP after five years of official release." Conversely, buying sealed packs is not the smart approach if your real interest is specific cards or characters. "If you're trying to invest in individual cards, do not buy sealed products in the hopes of getting valuable cards," he says. "Pull the trigger on cards shortly after they are released, within the first year or so, and hold them over time." Among individual cards, he says, the surest investments are the most popular characters, Pikachu, Charizard, and also Eevee: "Everyone loves Eevee because it is cute and it evolves into many evolutions of different types, water, fire, lightning, etcetera."

Pratte offers the advice that older rare mints are the best, and he also says, "Don't dive in headfirst to the super-popular things right away. Give it time."

As far as where to make your deals, Majeske says eBay will get the best prices for sellers, and TCGPlayer.com is where to go to move a lot of cards at the same time. He recommends checking out Facebook, too, either in its Marketplace or in a group called VirBank City PokéMart, which has nearly 48,000 members.

Who knows? Play these cards right and maybe one day Logan Paul will be knocking at your door.

A Legendary License

Through licensing and tie-ins, Pokémon has become the most valuable franchise in the world.

BY AVA ERICKSON

POKÉMON IS THE HIGHEST-grossing media franchise of all time, surpassing everything from Hello Kitty to Star Wars to Mickey Mouse & Friends. According to Statista, its estimated all-time total revenue sits around $100 billion. Revenue for the Marvel Cinematic Universe sits at $35.3 billion.

The Pokémon IP (intellectual property) is owned by three companies—Nintendo, Game Freak, and Creatures—creating the Pokémon Company, which manages all Pokémon property, including marketing, licensing, and brand management in Japan and worldwide (through the Pokémon Company International). The Pokémon Company's net worth is believed to be around $15 billion, with earnings coming from a variety of different sectors, such as video games, trading cards, and apps. The largest contributor to the company's profit is licensing agreements and tie-ins, which the Pokémon Company website says allows the brand to "adventure into myriad

Pokémon's collaboration with the contemporary streetwear brand PUMA is one of many far-reaching licensing partnerships.

new areas we at Pokémon normally couldn't approach on our own."

According to License Global's 2023 report, the Pokémon Company International is the fifth largest licensor in the world, garnering a total of $11.6 billion in retail sales in 2022, a $3.1 billion increase from the year prior. "Not only is Pokémon this brilliant story, but it has this real multigenerational appeal, which gives it so many different layers, so many different on-ramps for new fans, and so many different access points." says Ben Roberts, the content director at License Global and a Pokémon fan. Successful licensing relies on fandom, he says: "One of the really powerful things about brand licensing is how we showcase our identity as fans. Pokémon knows this, and they communicate with the fans all the time in order to find out what they want and how they're engaging with the brand. And they're really authentic and creative with how they're doing it." He adds, "It's for the fans, not to the fans, if that makes sense."

The multibillion-dollar increase in retail sales between 2021 and 2022 made Pokémon the second-fastest-growing brand in terms of licensing revenue, behind the Walt Disney Company. Due to that success, the Pokémon Company earned multiple awards in 2022, including the License of the Year award from the Toy Association.

Roberts says he doesn't think there was a particular moment that led to this substantial increase in sales, but that Pokémon is just getting better every year. "As the generations evolved, Pokémon kept bringing in new regions, new Pokémon, new starter games, and they've always been growing the brand through new touchpoints and evolving that story," he says. This multifaceted and ever-evolving model contributes to the longevity and licensing power of the brand.

Because of the wide range of product types Pokémon has to work with, and the huge fan base, the Pokémon license holds a lot of value. According to Roberts: "They know they have this incredible intellectual property that people engage with. I think they curate it, and I think they look after it." He adds, "They don't really have to hard-market things—they just know that the stuff they create is cool, it links to the brand really well, and people will want it."

One of the Pokémon Company's most successful licensing agreements came in 2016 with the launch of *Pokémon GO,* an augmented reality game that can be played on smartphones. The app uses GPS so players can find, catch, and train Pokémon located in various places in the real world. The app was created in collaboration with Niantic, a California-based software development company, and has garnered more than 1 billion downloads since its inception. While the app is free to download and play, it has generated more than $4 billion in revenue through in-app purchases. *Pokémon GO*'s success is mainly attributed to its innovative concept that blends real and virtual worlds, millennial nostalgia for the Pokémon of the late '90s and early aughts, and its accessible format (users don't need to purchase a separate gaming device to play). "It's probably the most ingenious creation I've ever seen," Roberts says. "It is brilliant. It allows you to access the brand anywhere, at a time that suits you. Like I'll go for a hike with my kids, and we'll dip in and see what Pokémon are around, and then we'll come back out. It's not overwhelming, and it's just so 'fan-considered.'"

"Pokémon kept bringing in new regions, new Pokémon, new starter games, and they've always been growing the brand through new touchpoints."

Since 2016, the Pokémon Company has continued to collaborate with Niantic and other software developers to create apps like *Pokémon Sleep,* a sleep-tracking app launched in 2023, and *Pokémon Unite,* a 2021 multiplayer online game. While these apps have not had the same level of success as *Pokémon GO,* the Pokémon Company says they will continue to partner with app developers so Pokémon can become accessible to more people worldwide.

While the majority of the Pokémon Company's revenue comes from licensing agreements, *Pokémon* video games, developed by Game Freak and published by Nintendo, continue to be an important profit generator for the brand. According to the Pokémon Company, it has shipped more than

BY THE NUMBERS

When it comes to total dollars earned through merchandise, box office, television, and games, Pokémon is the highest-grossing media franchise of all time.

POKÉMON
With scores of licensing deals, Pokémon's income has soared over 25 years.

HELLO KITTY
Created in 1974, the fictional feline has found success among teenagers and adults.

MICKEY MOUSE & FRIENDS
Certainly the most famous cartoon mouse, Mickey first appeared in 1927.

STAR WARS
The popularity of the Star Wars franchise is almost as powerful as the Force itself.

ESTIMATED ALL-TIME REVENUE OF SOME OF THE MOST VALUABLE MEDIA FRANCHISES IN THE WORLD (IN BILLIONS OF U.S. DOLLARS), ACCORDING TO STATISTICA. A MEDIA FRANCHISE IS A COLLECTION OF RELATED MEDIA THAT STEM FROM THE SAME ORIGINAL WORK.

480 million units of *Pokémon*-related video game software. The most recent release, *Pokémon Scarlet* and *Violet* (2022), was the company's third-best-selling game, with 23.23 million units sold as of June 2023, according to Statista. The company has not released the exact profit numbers from the game, but since units sell for about $60, the estimated gross sales could be over $1 billion. The best-selling *Pokémon* game remains the original *Red/Green/Blue* version for Game Boy, which has sold over 30 million units since its release in 1996.

Although Pokémon was originally born as a video game series, Pokémon cards, developed by Creatures Inc., have also become a hallmark of the brand. The cards can be used to play a trading card game that aims to re-create the video games, with players selecting a strategic deck to battle their opponent. The cards, which feature various Pokémon, are also collector's items, and certain rare cards can sell for thousands of dollars. The most expensive Pokémon card ever sold was the Pikachu Illustrator, purchased by influencer Logan Paul for $5,275,000 in 2021. Over 52.9 billion cards have been produced by the Pokémon Company, and they are sold in 89 countries and regions around the world.

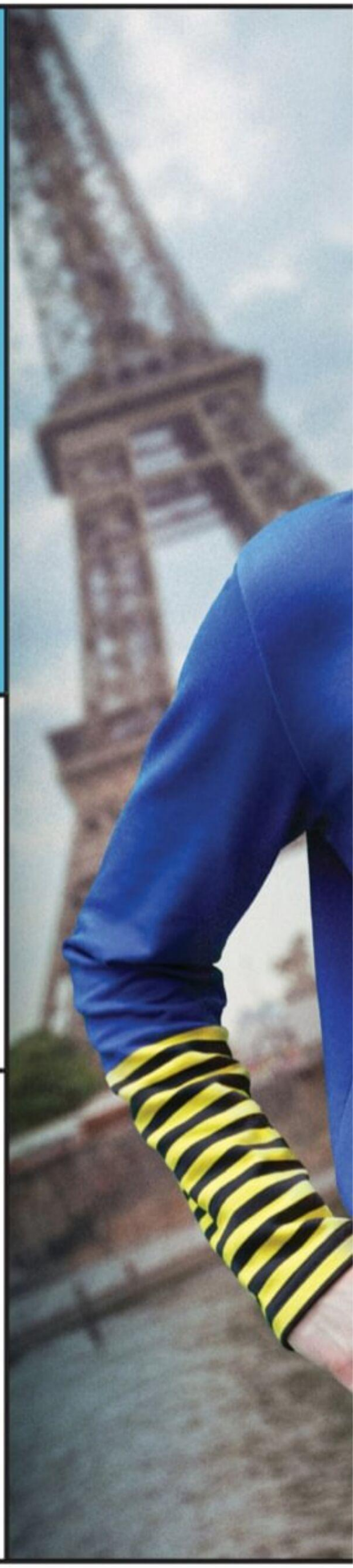
Pokémon movies, TV shows, and manga have also become a vital part of the Pokémon brand. The *Pokémon* animated TV series, which is now in its 26th season, first came out in Japan in April 1997 and has aired in 192 countries and regions since. The show has spawned numerous spinoff series, 25 anime films, a live-action film, and 27 short films. The full-length feature films have earned almost $2 billion in gross box office revenue.

Between video games, trading cards, apps, film and TV, and, most important, licensing and tie-ins, Pokémon has set itself apart from every other media franchise—despite being founded more than 20 years after the rest of the top five highest-grossing franchises.

The Best (and Most Bizarre) Collaborations

Smell like a Pokémon! This and other life goals are now achievable.

BY AVA ERICKSON



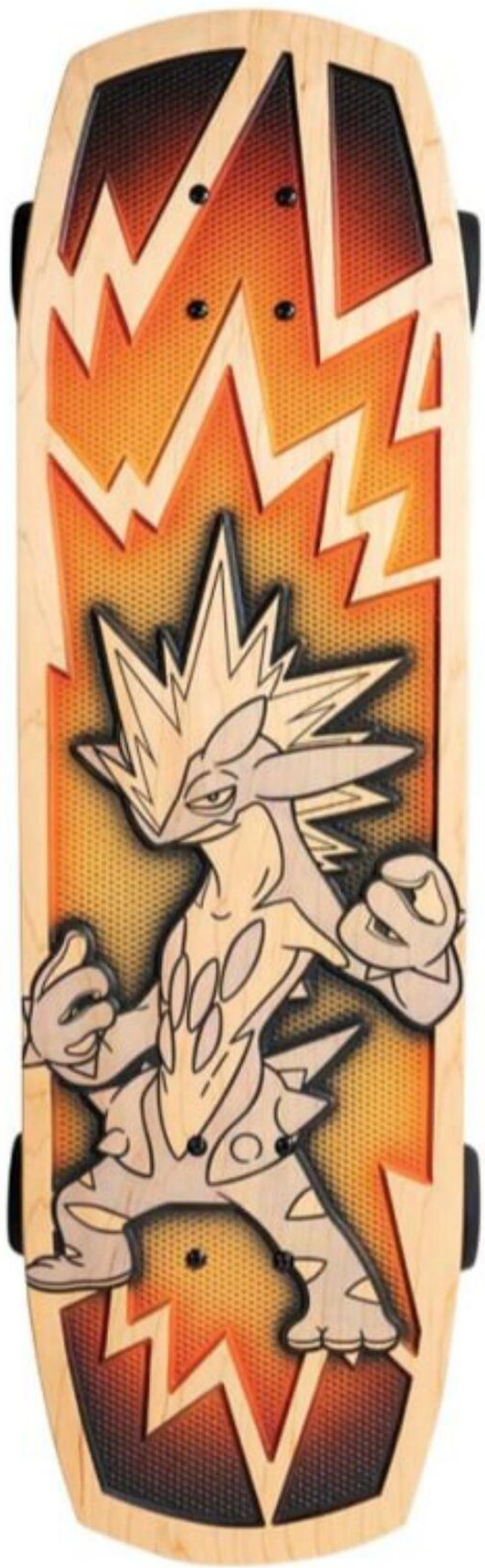
POKÉMON SEEMS TO BE EVERYWHERE. PEOPLE ROCK PIKACHU T-SHIRTS. Poké Ball keychains dangle from backpacks and purses. Pokémon plushes line back windshields. In 2022, the Pokémon Company International generated $11.6 billion in licensing and merchandise profits. While much of the merchandise is standard apparel and toys, Pokémon has gone above and beyond, partnering with other brands to create some of the weirdest and most outlandish pieces of merch. From Boeing planes to legitimate currency to toilet paper, Pokémon has made its way into just about every industry.

AIR VAL POKÉMON COLOGNE

Air Val International launched the Pokémon cologne in 2003. In 2016, with the debut of *Pokémon GO,* the product resurged in popularity among kids and adults, selling out on sites like Fragrance .com and FragranceX. It even got a 4.61/5 rating on Fragrantica.com, an online perfume encyclopedia. One Amazon reviewer, who purchased it for their Pokémon-loving brother, was only partially satisfied: "Smells terrible, but the look on his face, and the fact that it will be displayed in his home, was worth it."

POKÉMON X BALMAIN TRAINER FASHION SET

While Pokémon has collaborated with many brands and designers over the past 25 years, it made its entrance into the world of high fashion in 2022 through a limited-edition line with Balmain. According to the brand, "Surprising as the pairing may be, it does make perfect sense—for Balmain." The line features T-shirts, sweaters, sneakers, and bags patterned with Balmain's iconic maze print.

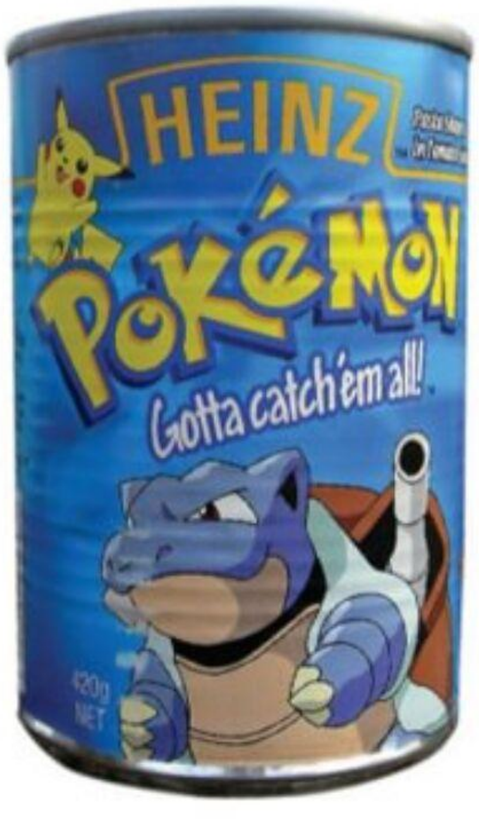


POKÉMON SKATEBOARDS

You can now ride your favorite Pokémon. In 2020, Pokémon Center teamed up with skateboard craftsman Bear Walker to make a line of Pokémon-themed skateboards. The launch featured five decks, each sporting a popular Pokémon character. Since then, the brands have continued to collaborate, releasing new designs throughout the past three years.

POKÉMON HEINZ PASTA

In 2000, Heinz released two versions of Pokémon Pasta, a canned pasta with noodles in the shape of various Pokémon characters. Initially, two versions were released: Red Version and Blue Version, which featured shapes from the corresponding games. After the Red can was discontinued, it was replaced by a Gold and Silver version with Generation II Pokémon-shaped pasta.



MONPOKÉ TOILET PAPER

In 2022, Pokémon's kid-focused brand Monpoké announced one of the oddest collaborations yet: Pokémon-themed toilet paper. The scented, double-ply paper is printed with colorful Pokémon characters and comes in four different pattern options. The message is clear: You have to wipe 'em all.

POKÉMON CURRENCY

In 2001, officials in the tiny island nation of Niue, located off the coast of New Zealand, decided to put Pokémon characters on their money. Each coin featured the Niue Coat of Arms on one side and either Pikachu, Bulbasaur, Charmander, Squirtle, or Meowth on the other. Fans loved the coins, and since then, Niue has released coins featuring characters from other popular franchises. While each coin is only worth $1 NZ ($0.62 in the U.S.), Pokémon coins are currently selling for as much as $13,000 for a set of five.

ANA POKÉMON JET
In 1998, in conjunction with the release of the first *Pokémon* movie, All Nippon Airways revealed its first Pokémon-themed jet. The Boeing plane, whose exterior was covered in colorful Pokémon characters and Poké Balls, was so popular that ANA ended up launching several more Pokémon jets, which flew domestically in Japan and to North America between 1998 and 2016. The company recently revived the concept with an Eevee Jet and a Pikachu Jet, which not only feature Pokémon-themed exteriors but also a complete Pokémon travel experience, including Pokémon boarding passes, napkins, headrests, and souvenirs.

GENGAR SLEEPING PILLOW
Inspired by one of Gengar's signature moves—"lick"—this pillow/blanket/sleeping bag features a long plush tongue that rolls out of a Gengar head. The product's seller, Premium Bandai, explains that you can either lie on the tongue with your head inside Gengar's or use his head as a backrest while you extend your legs on the padded tongue. Cozy! And it's no steal: This odd product sold for about $250 USD in Japan.

MAGIKARP TAIYAKI MAKER
Taiyaki is a fish-shaped cake often sold by Japanese street vendors, filled with red-bean paste and made by pouring batter into a fish-shaped mold. *Tai* are red sea bream, a type of fish thought to bring good luck in Japan, but Nintendo offered a Taiyaki maker molded after a different beloved fish: Magikarp. A limited number of these machines were made, and they now sell for more than $300 on eBay.

3

Pokémon GO Mania

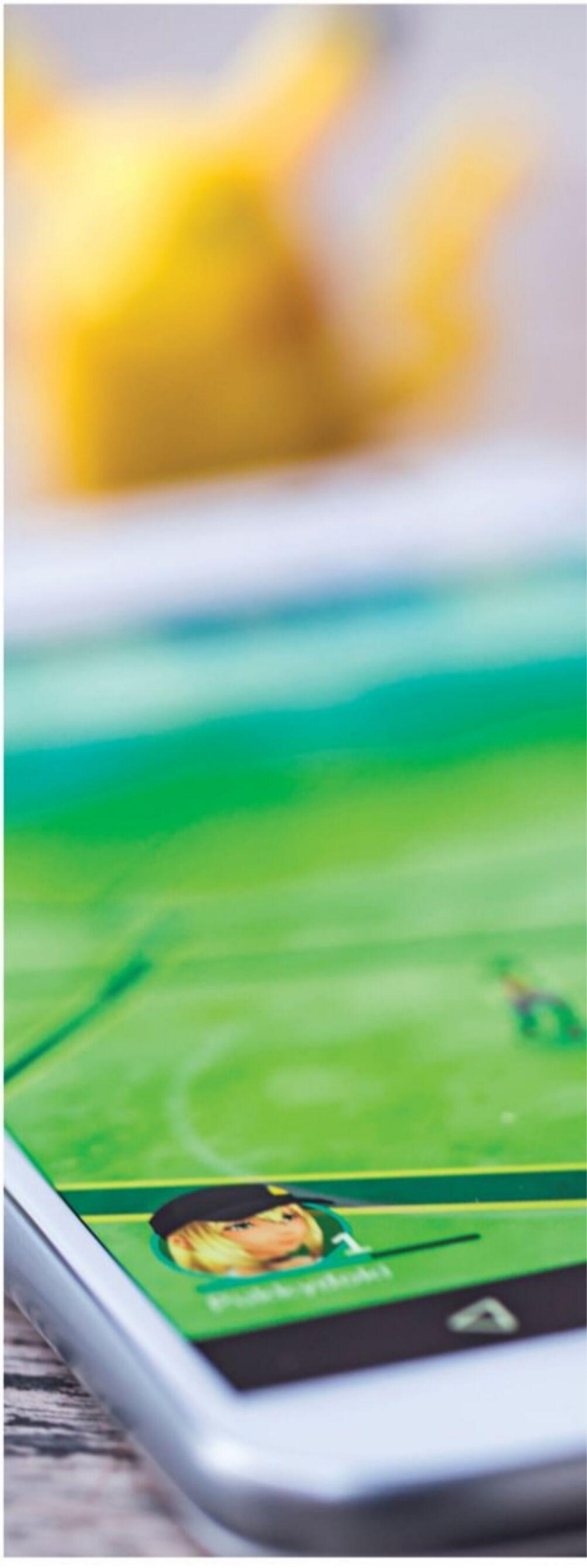
In 2016, augmented reality and Pokémon collided in a game that would dominate the cultural zeitgeist.

More than 100 countries have gained access to Pokémon GO *since the mobile game launched in 2016.*

A Player's Review

When *Pokémon GO* was released in 2016, a writer learned the ropes from the perfect mentor: his kid.

BY MATT PECKHAM



"D

ADDY—I MEAN, BULBASAUR—there's a Pokémon over there!" My almost 4-year-old son—I mean Jigglypuff—is holding my smartphone with one hand and stabbing the air with the other, like someone who's just spied a talking dog. We've code-named each other with the monikers of our favorite Pokémon, the adorable little monsters at the heart of Nintendo and the Pokémon Company's blockbuster critter-snatching franchise.

I glance at the smartphone's screen and spy a tiny lemon-lime caterpillar bopping near some real-world shrubs a few feet over. We're tinkering with the augmented reality game for iOS and Android devices by former Google startup Niantic called *Pokémon GO*. As in get up and go, because there's no game to play if you're not physically up, out, and walking around.

That's because Niantic's mapped a fantasy world brimming with Charmanders, Squirtles, Weedles, and more onto real-world streets, parks, and build-

ORIGINALLY PUBLISHED ON JULY 12, 2016

ings by employing a miracle of algorithmic wizardry and real-time location data. Players, or "trainers" in game-speak, can team up to square off against others for dominion over virtual turf mapped onto real landmarks (churches, sculptures, or museums). Imagine bug collecting meets king-of-the-hill meets Google Maps. This novel amalgam of beloved franchise, smartphone technology, and free-to-play business model turned *Pokémon GO* into an international overnight hit a matter of days after its 2016 release.

"Okay, Jigglypuff, but hold my hand," I tell my son, who darts out the door to the shrubs and starts swiping his finger on the phone like someone trying to strike a wooden match. Each swipe lobs a tiny red-and-white sphere called a Poké Ball at the caterpillar. After three or four tries, the ball connects, and both he and the game go nuts. There's shouting and jumping, and then the screen tells us the creature's name. "Daddy, we got Caterpie! We got Caterpie!" he squeals. In my mind, a.k.a. "augmented reality 1.0," a parental "mission accomplished" banner has just unfurled with a satisfying *thurp*.

Off we stroll from our cabin on the banks of the Mississippi, where my family is spending a lazy summer vacation. It's turned out to be a strangely amusing mid-afternoon lark, weaving between cottonwoods and cattails, a park activity gym and a ranger station. At one point we almost veer into the weeds, where poison ivy lurks. At another, my son wants to climb the steps to the deck off the back of the ranger station "because please Daddy please, there's a Pokémon up there!" Yes, *Pokémon GO*'s exalted reach extends even to Nowhereville, Flyover Country. As soon as my son figured out there were water-based Psyducks and Poliwags and Krabbys lurking around a nearby river, *Pokémon GO* became an obsession.

The game as experienced by someone a bit older, on the other hand, probably won't. Instead of fighting to "capture" wild Pokémon in chess-like, stat-riddled battles, as in the older Game Boy and Nintendo 3DS games, players have only to get close to wherever the app indicates there's a creature lurking. Find one and the screen shifts to camera mode, at which point you'll see a colorful Ivysaur or Rattata or Pikachu mugging near whatever your camera's scanning, be it your couch, someone else's front lawn, or in front of the Supreme Court. Swipe to flick your Poké Ball, and presto, your collection swells, though it's hard to miss, because the game doesn't want you to.

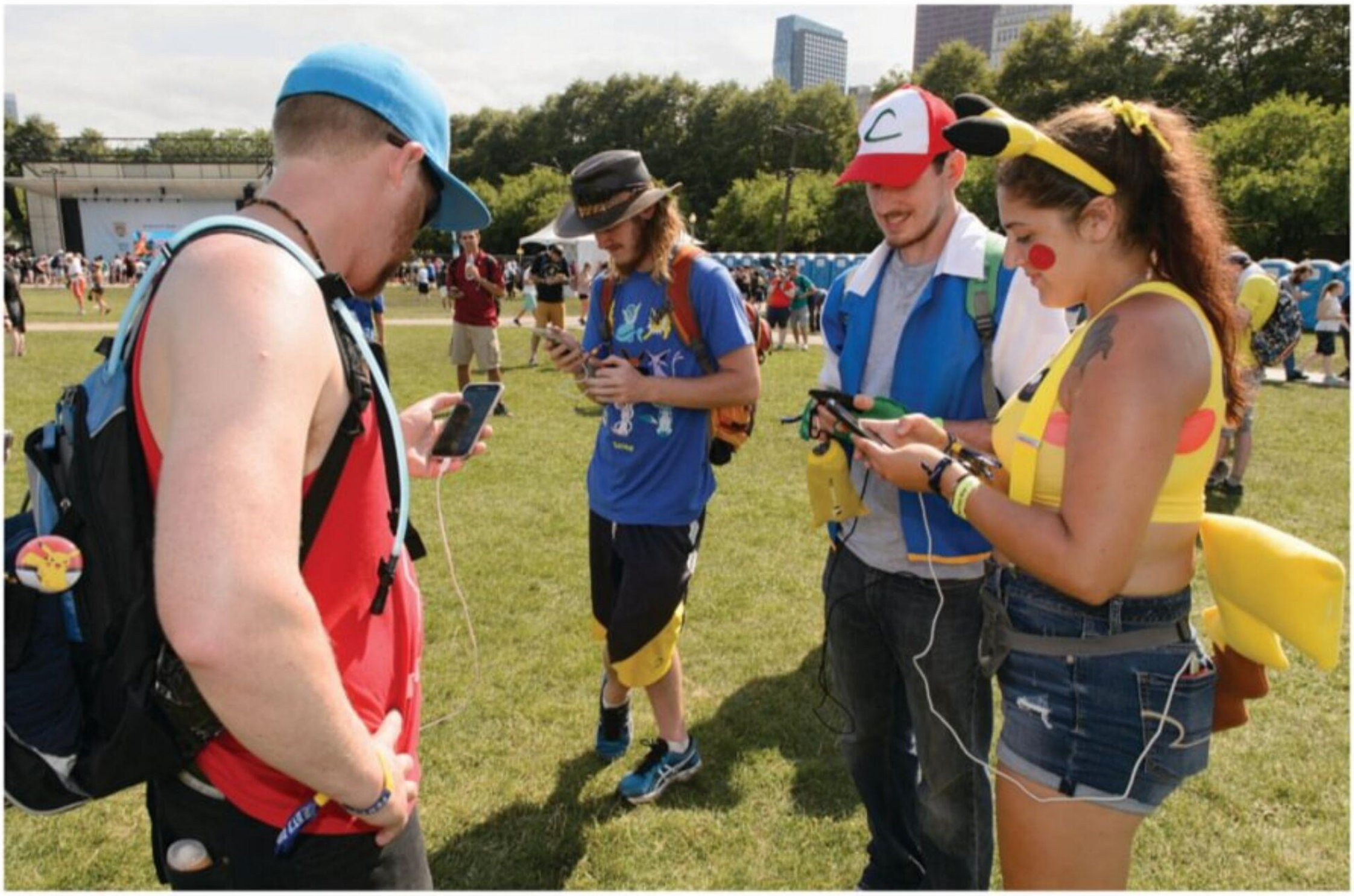
It's as if Niantic, having laudably asked players to get up off their duffs and wander upwards of miles in the real world to make headway in the game, doesn't want to offend by piggybacking a bona fide game on top of its stealth exercise regimen. It's a paradox: You're enticed to get out and notice things in the real world that you might otherwise blow past (a good verging on grand thing), but in the guise of an experience that doesn't feel much like a game at all (a dawning disappointment the more you play).

As soon as my son figured out there were water-based Psyducks and Poliwags and Krabbys lurking around a nearby river, *Pokémon GO* became an obsession.

Pokémon GO could (and arguably should) have mitigated this by making its king-of-the-hill battles more interesting. Pokémon gyms in the game are special locations mapped onto real-world landmarks ruled by leaders who can be challenged by nearby rival players. Level up, join a team, and you can vie for control of virtual real estate, which in theory sounds like the stuff of Poké-dreams. But in practice, players just tap to attack or swipe to dodge. And not in a way that rewards thoughtful dexterity, but more a confusing slapdash way that feels mostly down to chance. Clicker games like *Adventure Capitalist* have more nuance.

Playing the game drains battery fast, though the same is true of using an app like Google Maps, so we're maybe talking more about a categorical shift in app categories there.

As a referendum on augmented reality—that other alt-reality tech lying in wait to leapfrog the recent wave of niche wraparound headsets—*Pokémon GO* is a slam dunk. But as a game, once the hunt-and-catch novelty wears thin (or the



Fans in Pokémon cosplay attended the Pokémon GO Fest in Chicago's Grant Park on July 22, 2017.

soles of your shoes do), there's not enough happening under the hood. It's effectively the inverse of studio Game Freak's acclaimed turn-based strategy role-playing games responsible for the lion's share of the franchise's popularity. Which is fine, of course, because Nintendo's argument is that games played on smartphones shouldn't imitate games played on other platforms.

I think that's exactly right. But I don't think the corollary is to hollow out the gameplay. Is the game missing features Niantic's planning to add? Should trainers be able to battle other trainers without having to go to real-world gym hot spots? Should we be able to see other trainers (or at least other teams) on the map? Will *Pokémon GO 2.0* be the wealth of more tactically interesting combat so many wanted? Will we eventually be able to trade Pokémon with other players? We can hope. (The firm's chief has promised updates to deepen *GO*'s gameplay.)

"Daddy, I'm running really fast!" says my son later from his booster seat in the back of my car. He's once more in possession of my phone and swiping away. We're cruising through light summer evening traffic on the way to a swim lesson in town, my Honda Fit's modest speed making *Pokémon GO*'s game trainer sprint. Every few blocks he makes sounds of exasperation or delight as nearby critters blink in and out of existence.

I ask him to describe what he's doing in the game, which he takes instead as invitation to explain the game itself. "So you have to throw the Poké Balls at the Pokémon," he tells me, pausing. I imagine his thoughts spooling up like a jet turbine. Or maybe he's just busy winging Poké Balls. "If you miss, you lose," he continues, his tone almost dour. And then, like sunlight shooting through the clouds, his words brightening, he says, "But if you get the Pokémon, you win!" At this point in his life, it's enough.

How *GO* Took Over the World

A smartphone game infiltrated real enviornments and created a global community.

BY ALEX FITZPATRICK

I WAS GETTING READY FOR THE week ahead on a Sunday night when I got a text from my mom: "How do I play the new *Pokémon* game?" As true a sign as there is of a phenomenon.

Pokémon GO is a smartphone game that blends the real and digital worlds, tasking players with exploring their neighborhood to find creatures and treasure for in-game use. In the days after it was released in the U.S., *GO* was seemingly everywhere. Walking around New York City felt like being in an episode of *Black Mirror*. People were wandering around with their heads in their phones—more than usual—and every once in a while, they would stop and exclaim, "There's a Geodude nearby!" or some such. The hunt is on.

GO's popularity extends well beyond this city. Scores of YouTube videos show players worldwide going for drives around their neighborhoods (they will brake for Pokémon).

Fans gathered at the Pokémon GO Fest in London's Potters Fields Park in 2023.

Clockwise from above: A Pokémon GO Lure Party in central London; "Pokémon Day" in Mexico City; Paris is a popular destination for GO players; the Citadelle military area in the city of Lille banned the game.

The game was developed by Google spinoff Niantic, but Nintendo investors celebrated the company's involvement regardless, sending its stock up over 20 percent the week of release as they cheered a rare success in smartphone gaming. (Nintendo is a part owner of both Niantic and Pokémon's license owner.)

What explains *Pokémon GO*'s popularity? It offers an interesting twist over most games in that players must set off and move around their physical world. (Blog Gizmodo's headline nailed it: "Sore Legs Become Pandemic as Pokémon Go Players Accidentally Get Exercise.") But beyond that, *GO* is almost boringly simple: Once you encounter a Pokémon in the wild, the game switches into "capture mode," where users flick Poké Balls at the creature until they nab it. It gets more interesting a few hours in when players are able to lay claims to Pokégyms, digital representations of real-life landmarks where creatures can battle one another for supremacy.

The Pokémon skin is going a long way toward fueling this fire. Millennials feel considerable nostalgia for *Pokémon,* which had its heyday while we were middle schoolers. Younger kids, meanwhile, are discovering (and loving, it seems) the franchise for the first time. It remains the third-best-selling game series ever, behind *Mario*'s many iterations and *Tetris.* Had this been anything other than a *Pokémon* game, there's little chance it would've caught fire the way it has. (Indeed, Niantic's previous and similar game, *Ingress,* has a dedicated but

relatively small player community of amateur cartographers.) It's also possible that because *Pokémon GO* forces players outside, they're more visible than people enjoying the latest *Call of Duty* or *Madden* title.

By plan or by coincidence, *GO*'s release was well timed. The summer months, of course, offer the best weather for getting out of the house and exploring your surroundings on foot. School, meanwhile, is out, giving younger kids plenty of free time. (*GO,* it should be said, has also generated some unfortunate news stories, ranging from near-miss car accidents to alleged robberies fueled by in-game items used to lure victims.)

Smartphone games have a habit of burning brightly and then flaming out. Remember *Bejeweled*? Or *Words with Friends*? Or *Dots*? Unlike the other apps, *GO*'s longevity could be due to the game's inclusion of real-world events, which take place all over the world. Nearly 200,000 players attended in-person Pokémon GO events in 2023, which greatly impacted local economies.

Statista reported that the events contributed $309 million to host cities in 2022, and Niantic is reporting that the company exceeded that achievement in 2023, with a massive $323 million spent at local businesses in hosts New York, London, and Osaka, including $73.8 million in tax revenue.

Summer 2016 might have been the true Summer of *Pokémon GO*, but with a devoted playership and consistent engagement, the game seems here to stay.

The Nostalgia Factor

Psychologists explain why *Pokémon GO* is so addictive and why older fans returned to the familiar franchise.

BY LISA EADICICCO

I'VE SPENT THE PAST FEW DAYS staring at a screen, scouting the nearby terrain for imaginary creatures known as Pokémon.

I could have written that same sentence when I was 8 years old and addicted to playing *Pokémon Blue* on my Game Boy Color. But here I am as a 26-year-old, just as enchanted by these little critters as I was when I first met them.

In the Pokémon universe, each fictional creature has its own special powers that correspond to its "type." An aquatic Pokémon like the turtle-themed Squirtle attacks its enemies with blasts of water. A grass Pokémon such as Bulbasaur whips its enemies with vines. Each game encourages players to catch as many different varieties as possible and pit them in battles against each other to advance.

I'm far from the only adult hooked on *Pokémon GO,* the first official game in the Pokémon franchise made specifically for smartphones. The evidence is easily seen—unlike other Pokémon games, *GO* requires players to explore the real world around them in order to collect Pokémon. I could barely walk around for 10 minutes on a weekend not long after the release without hearing a fellow player yelp about a nearby Pikachu or Bulbasaur. Less than a week after it was launched in the U.S., *GO* sat atop the iPhone and Android app store popularity charts.

What's creating all this excitement? In part, the fans who embraced *Pokémon* during their childhood in the 1990s are once again indulging in their old obsession. Nostalgia, experts say, can be a powerful force luring users to a new but familiar experience.

"If nostalgia is in play, and it evokes this positive emotion . . . our brain can substitute the question, 'Does this make me happy?' for 'Is this a good game?'" says psychologist Jamie Madigan, author of the book *Getting Gamers: The Psychology of Video Games and Their Impact on People Who Play Them.*

Indeed, nostalgia commands a powerful influence throughout pop culture, as evidenced by the sequels and reboots that seem unavoidable at movie theaters over the summer. That's because it is often associated with positive feelings and can help people feel more connected to others. At root, nostalgia is a kind of acute homesickness. The word comes from the Greek *nostos,* a return home, and *algos,* or pain.

"Nostalgia is just as much about the future as it is the past," says Clay Routledge, PhD, a professor of psychology at North Dakota State University who has been studying the psychological effects of nostalgia for 10 years. "It wouldn't surprise me at all if this *Pokémon GO* phenomenon was making people make new

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friends because they have these shared memories." (A story in the *Wall Street Journal* suggests that is indeed the case.)

To be sure, nostalgia is not the sole cause of *Pokémon GO*'s overnight success. Pokémon fans have long clamored for a way to enjoy the franchise on smartphones. This represents their first chance to do so without using unofficial emulation software.

"Putting [*Pokémon*] on the accessibility of a smartphone means the total available markets are monster numbers," says P.J. McNealy, chief executive of consumer research firm Digital World Research. Also driving downloads is the game's clever use of smartphone components like the GPS chip and camera, which together provide the illusion that wild Pokémon are out there in the real world, waiting to be caught.

That said, *Pokémon GO*'s clever game mechanics alone can't explain why the game has become such a runaway hit. Developer Niantic has a similar but non-Pokémon game called *Ingress* that has a dedicated but comparatively small number of players. That's evidence that Pokémon nostalgia, not gameplay alone, is the driving force behind what looks to be the breakout hit of the summer.

Pokémon GO, says Routledge, is "this perfect marriage of nostalgia, bringing something old that people have these memories of from their childhood. And coupling that with technology that allows people to connect and share these experiences in ways they could not in the past."

John Hanke at the Mobile World Congress in Barcelona in February 2017.

Q+A

Meet *GO*'s Mastermind

Pokémon GO made augmented reality accessible to average users. TIME spoke with Niantic's founder amid the game's booming success.

BY MATT PECKHAM

WHEN GOOGLE'S 2014 APRIL FOOL'S "Google Maps meets Pokémon" mashup teased an official Pokémon Master position at the search giant, it was obvious that the company was fooling around.

Except maybe it wasn't. Maybe, two years later, someone clinched that position after all. Only not at Google, but at an intrepid Google startup that has since gone independent. The San Francisco–based company Niantic takes its name from a fortune-seeking 19th-century whaling vessel.

Off the meteoric success of its augmented reality-meets-GPS game *Pokémon GO,* which launched in July 2016, Niantic founder John Hanke had maybe become the most powerful and insightful PokéMaster of them all.

TIME spoke with Hanke, who had been traveling in Japan, to chat about the game's runaway success, the impact of augmented reality (AR) at this scale, and what he finds interesting about the medium going forward.

ORIGINALLY PUBLISHED ON JULY 13, 2016

TIME: With all the hullabaloo over this thing, I imagine you're a little world-weary at this point.
HANKE: You know, it's been this adrenaline-fueled thing for the past week. I think we are a little weary, but we also just can't believe how amazing it as at the same time. No complaints.

Aside from some of the usual sorts of issues we see with any online game at launch, would you say things are playing out more or less as expected?
We planned for success, and we provisioned our infrastructure for it. But to be honest, we've been overwhelmed by the level of interest, by the sheer number of people who want to play and the amount of time they want to play. It definitely surprised us. We thought it would be popular. I mean, we didn't go into it thinking people wouldn't be excited by it.

But it's been interesting, this loop of people discovering it, hearing about it through media or social media, playing the game and bumping into other people playing the game, and then sharing their experiences around that through social media. It's led to this viral explosion of interest.

From our point of view, it's fantastic. We're just struggling to keep the infrastructure in place to keep absorbing the number of people who want to play it.

You were involved with *Meridian 59,* one of the earliest massively multiplayer online [MMO] games. Are the lessons you've taken from MMO design the same ones that apply to a game like *Pokémon GO*?
I think the MMO world—which is itself an outgrowth of the role-playing Dungeons & Dragons world—you can trace this all back to Gary Gygax and that strange, crazy game that people played with dice and paper back in the 1970s. That's led us here.

Pokémon GO and *Ingress,* our other game [and the studio's initial stab at augmented reality], are both very much MMOs. When *Ingress* was being conceived, I was thinking exactly about *Meridian 59,* with two main takeaways.

One is that playing against other people is always more interesting than playing against a machine. The challenge and competition of trying to outguess or outmaneuver a real person is infinitely interesting, and it doesn't get old. And then the other key thing from MMOs was the social coordination, the social organization, which in MMO worlds are called guilds, of course.

That's something we saw with *Meridian 59*—they spontaneously formed, and we ultimately built features within the product to support the guilds. So there were guild halls you could go to, and if you knew the secret way, you could get in and plan your next adventure with your buddies.

That social organization is exactly the same dynamic here. We saw it in *Ingress,* and we're seeing it in *Pokémon GO,* it's just in the real world. So instead of getting together with a bunch of avatars in a virtual guild hall, you're getting together with your friends, meeting and going out together, or meeting up with them someplace in the city.

It just blends in with real life, which makes it infinitely more interesting to me than something that's occurring only in this virtual space. Because it's real. Real friendships are forming. You're out having dinner, having drinks or whatever, and it just feeds and makes our lives better, rather than something that takes us out of that completely.

What do you think about augmented reality having this much impact on real-world behavior?
I think there have always been things that people have done socially together. There were bowling clubs, there were softball leagues, there were Lions Clubs. There are all these real-world organizations that existed as things people could do together in the community outside of the house. I think a lot of those have atrophied in the digital era.

It's true, people spend more time indoors, they tend to know their neighbors less. Some of those traditional activities have been supplanted by talking to people on Facebook or email, playing video games, and watching movies on our big-screen TVs. I think it's really awesome that digital technology has evolved to the point that now we can use it, because it's mobile, and we can build applications like *Pokémon GO* that can go and fill some of that void, some of these spaces that have been evacuated.

So I'm not sure *Pokémon GO* is something new so much as a new take on something that's been around for a long time. Which is people wanting things they can do together socially, to give people an excuse to get out and socialize with other people, which at the end of the day makes us feel good.

What do you think about the way this has people behaving in unique ways and on a large scale, converging on not just public spaces but other people's homes? Do publishers of virtual worlds have new responsibilities when the lines between imaginary and real worlds start to overlap like this?

I do think people are figuring out the social mores of how to act and what it means. It's to some extent new territory. To me, it's an outgrowth of things that have been around for a few years. We all have apps that we use to track our runs, to count our steps, to time our bike rides. I think that's gone hand in glove with people going out and doing more of those activities. Adding a gamified element to it and a social element, I would agree with you it's new territory, and people are figuring it out.

In terms of our responsibility there, we have guidelines for our players about how to play, about being respectful of the law and of people's private property and being nice to other users. We try to convey that to our users in every way that we can. The design of the product itself is deliberate in that sense. It's not a game about beating somebody up. The gameplay itself is friendly and, I think, conducive to positive social interaction.

We try to do what we can. The way things have taken off, it's definitely happened faster than we expected. I don't know that we have a great deal of control over that. We'll continue to try to do our best to guide people in the right direction as people's thinking about this evolves.

Is the distinction here between the way older MMOs flourished and your point about applying these concepts to the real world down to how fast this happened?

It's a very fast ramp-up. In the past decade, we've literally wired the world together with broadband networks with amazing amounts of capacity. And we've socially connected everybody through all the social networks you know and that people use.

So if anything, I'd point people in that direction and say that maybe in terms of the speed of things spreading virally, not only within a community or a country but globally, maybe an outgrowth of that platform, of that infrastructure that's been gradually put in place over the past decade, now it's there, and everybody is wired together with completely and robustly fantastic connectivity. So yes, things like this can spread very, very quickly.

Given the extent to which *Pokémon GO* operates in the public space, and both the public and media's tendency to focus on outliers or novel negatives, do augmented reality publishers have an obligation to react if statistically meaningful negatives start to occur?

From our perspective, this is not an overnight success. We started working on this problem space in 2011, we launched *Ingress* in 2012, we're now past our third anniversary, and [*Ingress* is] played in over 200 countries. We have events every month in cities around the world. I'm here in Japan because we'll have one this Saturday, and there will be over 10,000 people at that event.

We've really honed the dynamics for this type of game, the dynamics that we built *Pokémon GO* around through *Ingress*. We've watched the commnity develop. We know the things that are positive about the game that we wanted to carry over into *Pokémon GO,* the movement and physical exercises, discovering new places, the social aspect of it. The game was built around those cornerstones.

"Maybe it's going to be a bit before we're comfortable with what an augmented reality future can do for us. But frankly, it's already a lot of really positive things."

Are we going to have to have a cultural moment where we're coming to grips with what it means to interface with imaginary worlds layered on top of reality?

I think we're having it. [*Laughs*] You were asking about the media. There have been people who've looked at outlier cases of *Ingress*. At the end of the day, the community has always carried that story for us.

When journalists reach out to the community

From left: NetEase Games vice president Ethan Wang, Japan's Pokemon Company president Tsunekazu Ishihara, and Niantic CEO John Hanke in 2019.

and ask, "Why are you playing this game? Why are you doing this? Is it weird that people are out in the middle of the night?" the response is, "It's amazing, it's changed my life. I've met so many new people, I'm seeing the world in a completely different way. I'm walking three miles a day, and I was housebound and watching TV all day before I started playing this game." It's positive story after story.

If you go through the press archives for *Ingress,* which a lot of people didn't know about, it was a much more niche product than *Pokémon GO.* But you'll see that theme repeated over and over. Whenever I see people pick on a negative outlier, it is what it is. Those things are going to occur. The positive stories are pouring out from people in the community, completely of their own accord. We don't have to be the public relations platform for that—you can just go read it online. That's what we focus on, and I feel confident that will carry us through any of the negative stuff.

But it is sparking a really interesting dialogue out there, to your point about us having a moment. Yeah, maybe it's going to be a bit before we're comfortable with what an augmented reality future can do for us. But frankly, it's already a lot of really positive things, at the end of the day, and that's a good thing.

Thinking about the future and what's next for Niantic, what sort of augmented reality ideas do you find most interesting?

The unique thing about AR versus [virtual reality, or VR] is that AR enhances the things that we do as human beings out in the real physical world. It's not something that completely replaces them with a fantasy experience. There's of course this fantastical Pokémon element, but really it's enhancing your experience of going out for walk or doing something with friends.

I think that's the potential of AR, if you want to contrast it with VR. I think AR is something that can be with us all the time, that we can use during the day and in everything, from commerce to entertainment to social interactions, even dating. Those are all things where AR experiences are going to evolve from the ones we have on mobile phones today, just to be more integrated with our behaviors, if you will, and make the things that we do as human beings better. That's not a direct answer to your question, but I think it's those types of applications that make the things we already do more interesting, more entertaining, more efficient. That's the potential AR has for us. And it's a big one. The opportunities are huge.

Paving the Way for New Games

Niantic is creating new mapping technology that will allow future developers to create their own games like *Pokémon GO*.

BY ANDREW R. CHOW

IN 2022, NIANTIC, THE COMPANY behind *Pokémon GO,* announced the rollout of a hyper-detailed mapping system it hopes will pave the way for the expanded use of augmented reality (AR) in everyday life. For years, Niantic has been collecting spatial data from highly trafficked public spaces in cities across the world, and now it wants to give these immersive and precise maps to developers to create their own games, history lessons, and audiovisual experiences. Some privacy experts, however, are concerned about the onset of AR and what it means for public surveillance.

AR consists of digital elements that appear within real-world environments, which can be seen through either one's phone or smart glasses (like the defunct Google Glass). Instagram and Snapchat filters, for example, allow you to alter your appearance, your voice, or the surrounding scenery.

Niantic CEO John Hanke believes that AR will continue to be incorporated into everyday life in increasingly sophisticated ways. For example, in the future, you might be able to see directions to your destination overlaid on the streets as you walk them via smart glasses, or you could look at a building site and see its history and past architectural incarnations.

His company's new 3D map will allow developers to see exactly how their users move through the world and view their surroundings, which Hanke says is a key step toward "opening this science fiction reality we dream about. We can start putting virtual things into the world that are attached to the right parts of that physical world."

The map was created by culling more than a 100 million video snippets from Niantic game players (who opted into sharing their screens), developers, and surveyors. The most developed parts of the map are in dense city centers where the most data has been collected, including San Francisco, London, Tokyo, and New York City.

Independent AR developers will now have access to the technology—starting free in beta—on a platform called Lightship. There, they might create virtual animals that hide behind park benches, plaques for public statues delving into their forgotten histories, or mobile characters "painted on the ground and showing the path to your destination," says Hanke.

One of the first projects created with the new map's technology is a collaboration with the artist JR and the art company Superblue called JR Reality. JR is known for pasting giant photos of people in public places. Niantic's technology allows users to add their own JR-style portraits or voice messages to specific public locations, adding to those of everyone else who has made the same pilgrimage.

"Have you ever passed

somebody on the street and wondered what their story is?" JR asked in a statement. "It's time to go outside and explore, and reconnect with one another and show the world your face again. Together we can tell the world your story and meet the amazing people that live in your city."

Hanke, meanwhile, is particularly excited about how the map might improve Niantic's flagship product, *Pokémon GO*. A viral commercial that introduced the game in 2015 showed people watching the animated character Mewtwo soar over Times Square, but most people view the game through animated graphics on their phone. "This map paves the way for that giant Mewtwo above the crowd: to have the shared experience of many people watching the same thing from different vantage points," Hanke says. "This is what we've been dreaming of since the beginning."

Pokémon GO was arguably the first successful commercial use of AR. It was downloaded more than 500 million times in its first year, with aspiring trainers hunting Pokémon all over the world. Jacob Navok, the CEO of Genvid Technologies and one of the leading thinkers on the metaverse, says that Niantic's pedigree means its new map will likely be a sought-after tool for AR developers. "Releasing more, better, and cheaper tools to outside developers is key to the growth of the sector," he wrote in an email to TIME. "Developers who choose Lightship [Niantic's AR developer platform] will do so knowing that Niantic understands how to build product and not just APIs [programming code]."

As AR technology advances, many watchdogs have become worried about its impact on privacy. They worry that companies like Niantic will collect an astonishing amount of information that would then be vulnerable to hacks, and that people's movements could be tracked. "Every image that an AR device records is potentially one court order away from becoming a government tracking device," says Albert Fox Cahn, the executive director of the Surveillance Technology Oversight Project. He points to search warrants that have collected recordings from Amazon's Alexa and Ring cameras. Cahn also thinks that geofence warrants, in which police seek location data on every person within a specific area over a certain period of time, could be particularly threatening to AR users. (One of those warrants was ruled unconstitutional in Virginia, however.)

"It's something we take very seriously," Kjell Bronder, a product lead for Lightship, says regarding privacy. "For the contributions that these players can upload [to the map], we do everything in the background to anonymize and make sure that a lot of this data is scrubbed."

Niantic also released its own social media platform, called Campfire. This app is also map-based, with users able to see which other users are in a local area, message them, share content, and organize events. "Our big thesis is that the metaverse is something that happens out in the real world," Hanke says.

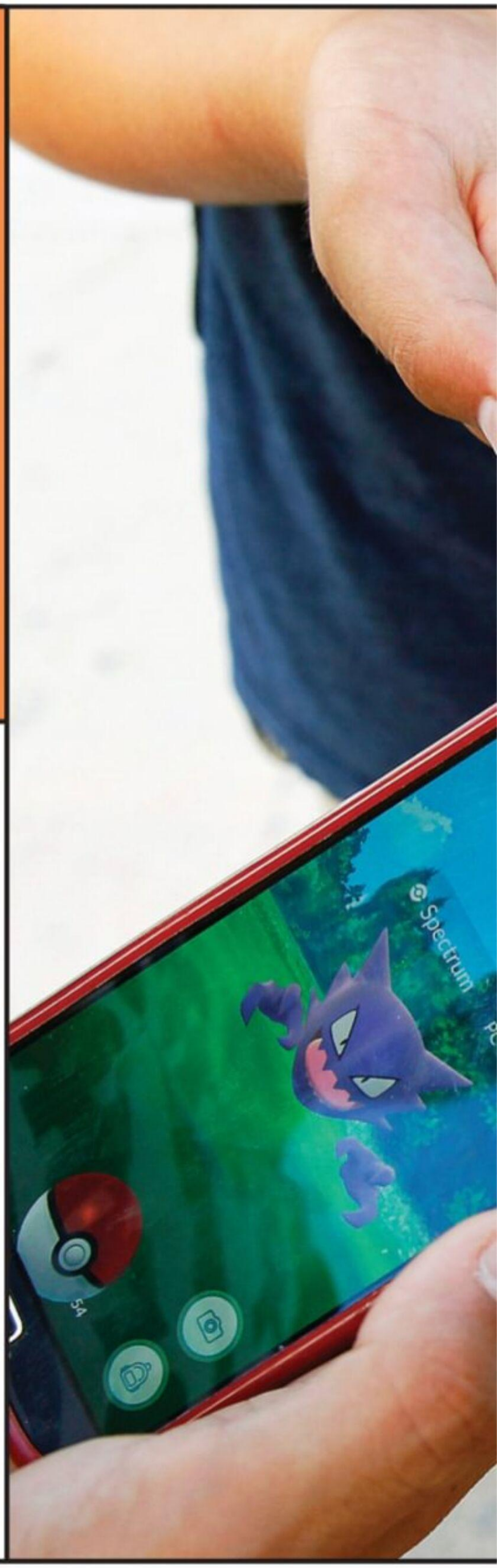
Become a *Pokémon GO* Master

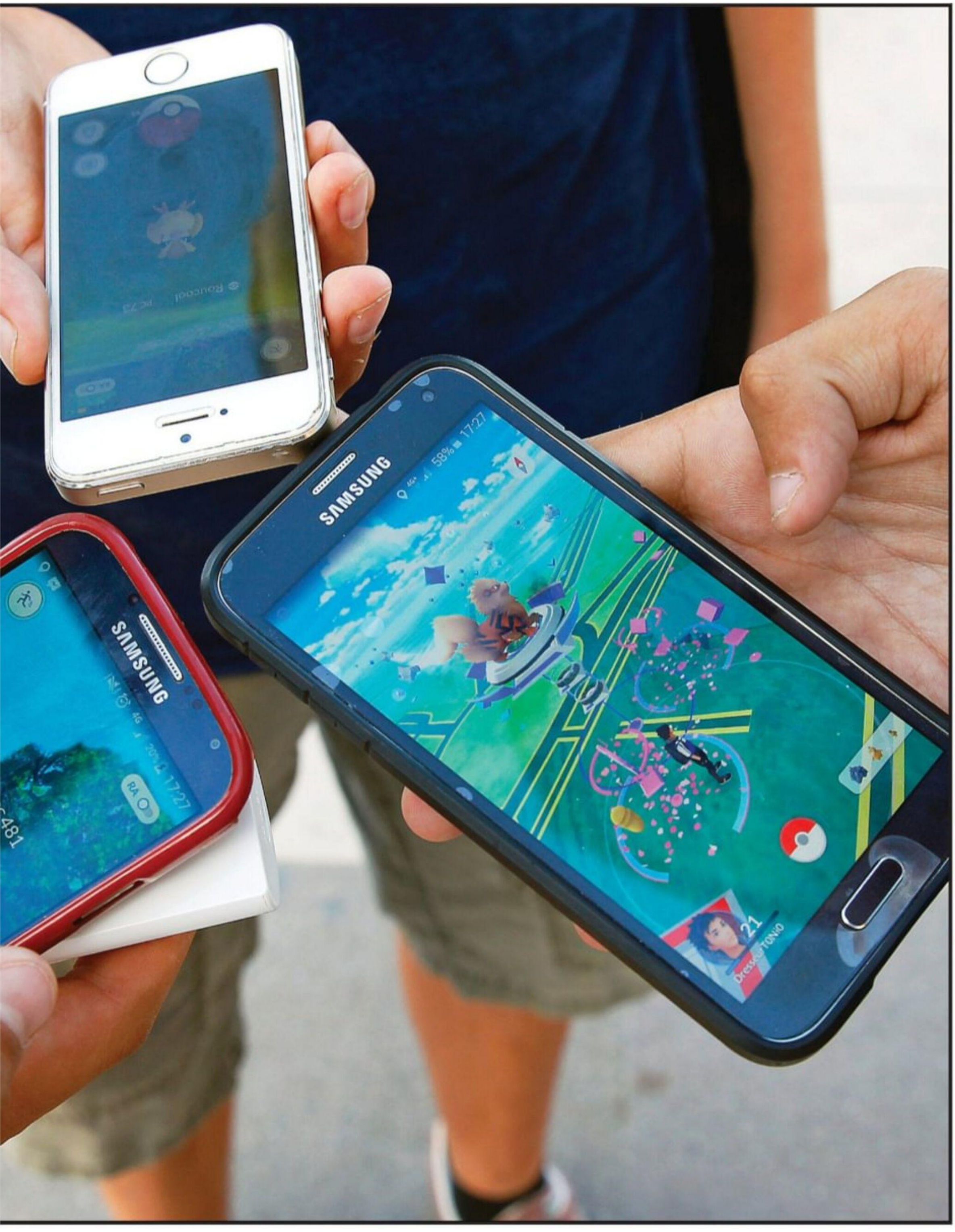
The app-based game is very different from the main series games.

BY LISA EADICICCO

***POKÉMON GO* IS UNLIKE ANYTHING POKÉMON FANS HAVE SEEN** in the past, and an outlier among current series entries. The app uses augmented reality to make it seem like Pokémon are actually in your surroundings, meaning you may see a Pikachu standing on the sidewalk or a Pidgey peeking out from behind a tree. While the faces may seem familiar to fans, the gameplay is actually very different from other Pokémon-themed games, which stay in the landscape of the game's world and feature catching mechanics that have been in place since the original games.

There are many goals in *Pokémon GO*. You can catch as many Pokémon as possible, battle them at gyms, team up with other players in raids, or square off with your friends. In *Pokémon GO*, you move your character by walking around in the physical world. The game uses your phone's GPS coordinates to move your in-game avatar, which means you need to explore different areas in the real world to find wild Pokémon and other goodies. If you want to catch a wild Pokémon that appears in your path, simply tap it. This will put the creature in your field of view, using the camera on your phone to make it look like the Pokémon is actually standing or hovering in front of you. From here, you can fling a Poké Ball at it to catch it by swiping up from the bottom of the screen.

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How do I get more Poké Balls and other items?

Poké Balls are easy to come by in *Pokémon GO*: You can get them at nearly every Pokéstop you visit. Pokéstops are real-world locations that are marked on the game's map as a circle with a Poké Ball in the center.

When approaching a Pokéstop (e.g., a park, a store, a street mural, etc.), tap the aforementioned symbol on the map to visit it. This usually only works when you're present at the location specified on the map. While some nearby Pokéstops may appear on your map, you can't actually check in and collect items unless you travel there.

Once you tap the Pokéstop symbol, spin the circle that appears on-screen to gather items like Poké Balls, potions, incense, and eggs. You can also buy Poké Balls and other items through in-app purchases.

This gear makes it easier to catch Pokémon and heal your Pokémon after a battle. Some of them will seem familiar to those who have played the Pokémon games for Nintendo's handheld consoles. Some of the most common items include Poké Balls, which are used to catch wild Pokémon, and various types of potions, which restore Pokémon's health after gym battles. Incense can be used to lure wild Pokémon to your location, and various berries and poffins can make it easier to catch Pokémon or increase the level of candies received.

Eggs, which can sometimes be found at Pokéstops, will eventually hatch to become new Pokémon. If you come across an egg, be sure to use the Egg Incubator in your items list. An egg hatches after you've walked a certain distance. This distance varies for each egg. Some eggs, for example, will hatch after you've walked five kilometers, while some will hatch after two kilometers. The longer it takes for the egg to hatch, the rarer the Pokémon inside.

How do gyms work?

Pokémon GO has two types of gym battles: friendly battles and rival battles.

In a friendly battle, you enter a match at a gym that's already claimed by your team. You can tell which team currently owns a gym by its color (red, yellow, etc.) Battling at a friendly gym gives you experience points, which helps you level up. But it benefits the gym as well: The more you train, the more Prestige that gym earns. Prestige is a unit of measurement that determines the level of a gym: The more Prestige a gym has, the higher the level. Gyms at higher levels are capable of holding more Pokémon to defend it from rival teams.

During a rival battle, you challenge the various Pokémon currently housed there to claim that gym for your own team. This involves battling all of the Pokémon that rival team trainers have left at the gym to defend it. The higher the gym level, the more Pokémon you'll have to defeat to claim that gym.

Gyms that are open for any team to claim will appear as gray on your map. To claim an open gym, enter the gym by tapping it and press the "Add Pokémon" button near the bottom of the screen. This Pokémon will then remain at the gym to defend it and will only be returned to your roster once it's been defeated.

During any battle, you can tap your opponent to perform a quick attack, swipe to evade an attack, or hold down on the screen and release to perform a special attack. You can only inflict a special attack when the meter below your Pokémon's health bar is full.

Can I battle friends?

With Trainer Battles, you can match up against another trainer by using a Battle Code, then face off using a team of three Pokémon. The fast-paced battles take place in real time, and your Pokémon can use both their Fast Attacks and Charged Attacks. The game prompts you to deploy one of your two protect shields to save your Pokémon from taking critical damage. Not all Fast Attacks charge at the same rate. Pokémon with Fast Attacks that power up quickly can perform their Charged Attacks sooner and more often, pressuring their opponent into blowing through their two Protect Shields.

How do I level up and train my Pokémon?

To evolve your Pokémon or make them more powerful, you'll need to give them stardust or candy. These items are collected whenever a Pokémon is caught.

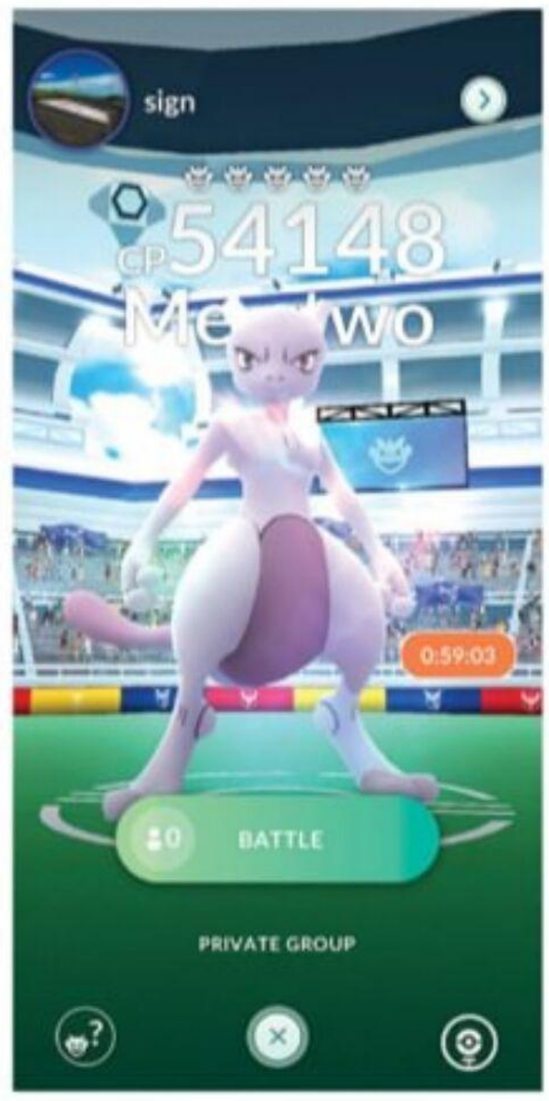
Each type of Pokémon requires a specific amount of candy to evolve. A Squirtle might need 25 pieces of candy to evolve, while a Pidgey needs 12. Each Pokémon comes with a certain amount of candy when you catch it, but it's not typically enough to evolve a Pokémon or power it up significantly. (Candy is specific to each species, so you can only evolve a Squirtle with candy obtained from capturing Squirtle. Stardust, however, is not specific to individual Pokémon.)

Candy or stardust can be used to increase a Pokémon's CP or combat points. The more combat points a Pokémon has, the better it will perform in battle. At trainer level 31 and up, you can earn XL candies that give Pokémon a huge XP boost and allow them to train past the CP level cap. These are available by catching Pokémon and Raid Bosses, walking buddy Pokémon, trading, and hatching eggs.

What about Raid Pokémon?

Select gyms host solitary and tough Pokémon. These bosses are more difficult to battle than ordinary Pokémon, so trainers can join up to take on the Pokémon. Use a link code or join a local raid near your location, and you can earn a chance to catch the powerful Pokémon and some extremely rare items.

Every month there is a new set of Pokémon, ranging from common 1-Star Bosses to rare 5-Star Legendaries for players to battle and hopefully catch. Once in battle you can perform your Fast Attack, Charge Attack, or dodge. If you are not able to defeat the boss in the battle, you may rejoin the raid and battle again.



Complete Field Research

Professor Willow, your mentor through the world of *Pokémon GO,* prompts trainers to help with his research as he investigates mysterious events in the in-game world. There are two types of research that trainers can help with: Field Research and Special Research. Field Research involves completing objectives, such as discovering and catching certain Pokémon or engaging in battles. Professor Willow will present the Special Research himself in pop-up cutscenes with activities that will take you further into the world of *Pokémon GO.* These research tasks offer rare items, loads of XP, and chances to catch special Pokémon.

4

Always Evolving

You don’t become the world’s most valuable franchise by resting on your laurels. Pokémon is continually expanding into new spaces and forms.

The Pikachu Outbreak event in August 2019 in Yokohama, Japan.

Introducing Detective Pikachu

In 2019, a missable spinoff game inspired a live-action blockbuster.

BY ANDREW R. CHOW

WHEN THE TRAILER FOR *Detective Pikachu* was released in the fall of 2018, a debate emerged over a seemingly trivial question: Does Pikachu have fur?

While the cartoon version of the beloved Pokémon has a smooth exterior, the trailer for the live-action film adaptation showed the mouse-like creature covered in yellow fur, worn thin in some places and scruffily overgrown in others. Many fans were repulsed. "Seeing Pikachu with fur is just extremely unsettling and wrong and shouldn't exist," one user tweeted at the time.

But for the film's visual effects supervisor Erik Nordby, the answer was obvious. "How can it not be furry?" he asks. "It would be this hard-surfaced yellow thing—the most disturbing thing in the world."

The fiery conflict over such a minor detail exemplifies the challenge that the creative team behind

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Detective Pikachu faced in making the first live-action film in the 24-year history of *Pokémon,* a wildly popular Japanese anime and video-game series that exploded in the '90s. Animating animals, as in recent live-action remakes of titles like *The Jungle Book,* is one matter. But transforming adored fictional creatures that have been drawn in one specific way for two decades is another entirely. The process saw more than 1,000 digital artists across the world working for three years through trial and error, all against a backdrop of ceaseless debate.

Given the current wave of live-action adaptations raking in huge box office returns across the world, from *Beauty and the Beast* to *Teenage Mutant Ninja Turtles* to *Paddington,* it's no surprise that the Pokémon Company would also want to bring its monsters into three dimensions. The film follows a former Pokémon trainer (Justice Smith) as he reluctantly teams up with a Pikachu (voiced by Ryan Reynolds) to solve his father's murder.

But the creative team faced an elementary problem from the jump: Many Pokémon creatures are physical impossibilities. One, Gyarados, has a gaping mouth that takes up most of its body and leaves little room for organs; Lickitung's enormous tongue is far too large for its mouth.

"The way those characters are drawn don't lend themselves to feeling real," Nordby says. "The ratio of the eyeballs to the head, the ratio of the limbs to the body—all of these are challenges you have to approach."

Nordby says there were about 25 Pokémon that were cut during the process after they were deemed too complicated to translate. The martial arts fighter Sawk, for example, was discarded when animators failed to agree on the texture of its judo-inspired outfit. "For Pokémon, what might feel like clothes is actually skin," Nordby says. "We would have hour-long conversations trying to wrap our heads around that."

The team settled on around 65 Pokémon that would appear in the movie and began trying to solve their anatomical riddles. "We'd build them as if they were an actual animal," Nordby says of his team at the Moving Picture Company, a visual effects company. They created detailed skeletal and muscle systems for each Pokémon, visited zoos, and consulted animal experts in order to have a reference point for every beak, tail, or paw. The waddling four-legged Bulbasaur, for example, was based on a baby bulldog in its playfulness and top-heaviness. Pikachu started off very rabbit-like, but eventually it became a cumulative creature inspired by the movements of marsupials and marmosets and the moonlike eyes of sugar gliders.

The Pokémon Company, however, had a different main priority: to protect its characters' unique charms. They were concerned that the Pokémon looked too dirty or were in danger of falling into the uncanny valley. "They did not want us to add elements such as nails and eyelashes," says Ravi Bansal, the art director for the film's creatures. It was also paramount that the designers preserve every creature's sense of *kawaii*—a Japanese term that conveys cuteness and charm (think Hello Kitty or Totoro).

Pikachu's vibrantly yellow fur grew, shrank, and fluctuated in color—the team took swatches of fur to filming locations to see how its colors would react to natural light.

This push and pull between cuteness and gritty realism—especially given the film noir style of the movie—necessitated dozens of sketches being sent back and forth. Jigglypuff, a cuddly singing sphere, was drawn with a pigskin-like exterior before receiving closely cropped fur. The ape-like Aipom received fingers. Hidenaga Katakami, a producer on the film who works for the Pokémon Company, says he asked the visual effects team to remove unhygienic aspects like "scruffy fur, stained teeth, and blotchy skin."

The team spent an inordinate amount of time on its main character, especially due to its venerated position in pop culture. Pikachu's vibrantly yellow fur grew, shrank, and fluctuated in color—the team actually took swatches of fur to filming locations to see how its colors would react to natural light. Reynolds, meanwhile, recorded his parts wearing a head camera so that his facial expressions would be reflected in his fluffy counterpart. "Many peo-

Justice Smith (left) and Kathryn Newton starred in Detective Pikachu *alongside Ryan Reynolds, who voiced the titular creature.*

ple around the world already know Pikachu, and we just could not damage their image of this iconic Pokémon," Katakami says. "He had to be cute. That was nonnegotiable."

Another extremely difficult Pokémon to nail down was Mr. Mime, a disconcerting mute humanoid that relies on miming to communicate. Bansal says the Pokémon Company tried to dissuade them from using the character because of its creepiness, but director Rob Letterman felt the creature was essential for an interrogation scene. "We settled on the idea that every surface needed to feel like a toy," Nordby says. They gave Mr. Mime foam dodgeballs for joints, hair tufts made of a Nerf-like material, and inflatable gloves like you'd find at a fair.

Once the designs were finalized, a puppeteering company in London was commissioned to create 3D Pokémon models and then operate them during filming. "We put the puppeteers through boot camps so that they understood the weight of a character: how fast they run or walk, and how they get up and down off surfaces," Nordby says. The creatures' expressions and textural details were sharpened during postproduction using CGI.

Since the initial outcry over Pikachu's fur, the general consensus online seems to have flipped over into enthusiastic anticipation. When the trailer for another live-action adaptation film, *Sonic the Hedgehog,* was released last week, many users wrote that Sonic's design paled in comparison into Pikachu's. "It's like the Sonic movie is Detective Pikachu's Picture of Dorian Gray," one user wrote.

The movie's creative team is unsurprised by this turn and point to years of meticulous back-and-forth development and a fierce trust in their own transformative decisions. Says Nordby, "What a razor's edge it is trying to find that character and knowing how many millions of people love it."

Bringing Them to Life

The animators had some key decisions to make when turning the cartoon favorites into three-dimensional avatars.

BY ANDREW R. CHOW

PIKACHU'S GOT A NEW FUR coat. *Detective Pikachu* marked Pokémon's first foray into live-action. The film tells the story of a former Pokémon trainer (Justice Smith) who teams up with a talking Pikachu (voiced by Ryan Reynolds) to solve his father's murder.

The film's creative team faced a tall order in adapting the creatures of Pokémon in a way that would both satisfy fans of the cartoons and also look real on-screen. TIME traced that three-year process—you can read about it here.

In interviews, Erik Nordby, the visual effects supervisor, and Ravi Bansal, the art director for the film's creatures, offered further insight into the specific challenges of transforming six Pokémon that appear prominently in the movie. Below are excerpts from those conversations.

Pikachu

RAVI BANSAL: We started off with various rodents [and] rabbits. But the moment you made him rabbitlike, it made him less appealing. He soon became his own thing where you're no longer referencing an original animal and just going, "Yeah, he ought to be fluffier here."

ERIK NORDBY: There was a whole series of early tests. Marsupials in general were hugely impactful in terms of how he should move. Sugar gliders too, in terms of how they maintain this very, very cute appearance with those large eyes.

The fur question was huge. The Pokémon Company wanted something that felt like a horse,

like a very sheeny, short fur that basically felt like no fur. But we felt that if it's not furry, it would be the most disturbing thing in the world, because it would be this hard-surfaced yellow thing. If it's going to have any sense of *kawaii* [the Japanese term for cuteness], there has to be a level of fur.

We started with very, very short and matted-down fur, like a pug's. It ended up feeling greasy and oily. We settled on a hybrid between a coon cat, a pug dog, and a red fox—and some spit polish as well.

Jigglypuff

Jigglypuff is a cuddly sphere that lulls its battle opponents to sleep by singing. In *Detective Pikachu,* Jigglypuff appears as a disgruntled lounge singer at a bar.

BANSAL: In the first few weeks, we were scrapping for direction. We were shooting off in a lot of different directions, and we made some drawings that I quite enjoyed but that will probably never see the light of day. We did a very paranoid Jigglypuff that I loved.

We put fur on Jigglypuff and sent it to the Pokémon Company, but they said that its body was actually much more like pigskin. We did a version of that, but it did look not particularly attractive or endearing. We added more and more fur.

NORDBY: You'd think: "That's simple—make a ball. Put some nubs on it." But if we do that, it'll feel like a balloon. So we took all of the time necessary to figure out that this is probably not an actual ball—it's probably something that's quite furry. The fur has been groomed into a ball, and underneath that there's a substructure. For every Pokémon, there's also the Pokémon underneath that.

Mr. Mime

BANSAL: When Rob [Letterman, the film's director] suggested using Mr. Mime, we asked the Pokémon Company, "What is he?" They went: "We don't know." They were actually trying to dissuade us from using him because they weren't sure what he was or whether he'd work well on-screen. That was a bit of a strange one.

NORDBY: When you look at the character, it instantly feels creepy. We had to figure out what aspects we could push and pull. We settled on the idea that every surface needed to feel like a toy. His joints are those dodgeballs we used to play with when we were kids. His gloves are the inflatable gloves you'd get at a fair. We had to find all of these evocative textures that just felt childlike.

His shape is so so simple: It's a series of balls and very simple shapes. So you constantly look for little tiny things that have a high level of detail that can counterbalance that very simplistic overall silhouette. The adding of very subtle freckles is something we found was very successful—it also helped with it looking a bit more cute.

Gengar

NORDBY: When you read Gengar's description, it gets right to the edge of being slightly scary. We developed a whole bunch of effects tests where all you would see were its red glowing eyes, and the body would form around those eyes. But we realized it was way too scary. We ended up finding something that felt more mischievous than scary.

The idea was to make something that felt extraordinarily liquid. We looked at a whole series of early tests that they did for the dementors in the Harry Potter movies—the flowing, cape-like aspect. We wanted to feel like it was something that could pay homage to that. We ended up shooting a lot of smoke on the day and trying to reverse it—but that didn't turn out to be super helpful.

Loudred

NORDBY: The big thing with Loudred is, where do we stick all the organs? When he opens his mouth it's a vacuous hole: There's little room for a brain or anything else. We didn't want to overthink it, but at the same time, we were trying to keep something that felt like it would feel real. That was a big challenge.

Lickitung

BANSAL: We interpreted his skin almost as marshmallow, and dusted. We needed a dry surface to accentuate the slobberiness of his tongue.

NORDBY: We built that tongue in reality with a big chunk of latex. It's completely gross, but we had to have something to wipe Justice Smith's face with [the actor gets licked by Lickitung in one scene].

For something to feel real, it has to have real-world grit and texture. But the Pokémon Company would see that and think it was dirty. We had to walk them through a whole series of slides and build the trust that we weren't going to make these things disturbingly dirty.

I wouldn't say that [the scene with Lickitung] was the Pokémon Company's favorite scene in the movie. That's one where we got right up to the edge of what they would be comfortable with.

The Best of the Best

In 2014—the 10th anniversary of the event—TIME spent a weekend with some serious trainers at the Pokémon World Championships.

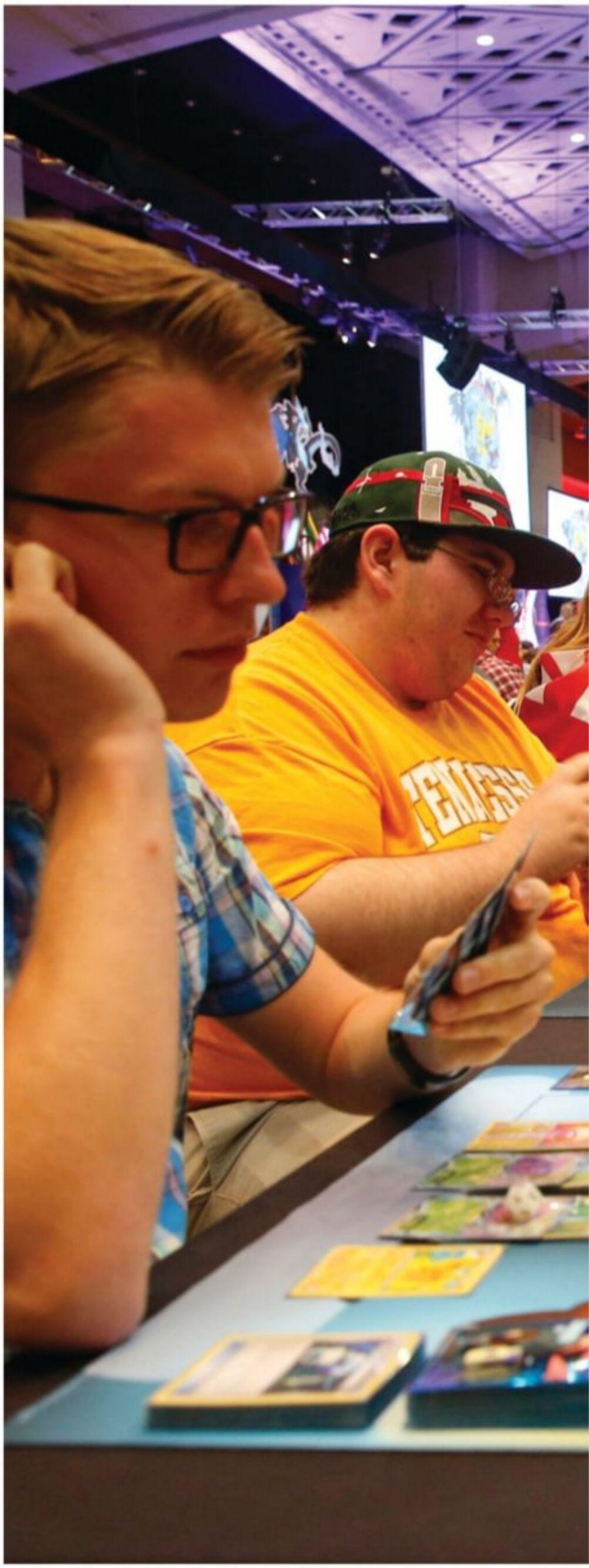
BY TESSA BERENSON

JAXSON PIWEK WANTS TO BE a world champion. He has been training for this day for months, even waking up at 4 in the morning and going to bed at 7 at night for the past week so that the time change between his home in Vancouver and the championships in Washington, D.C., wouldn't affect his performance.

Jaxson, 10, plays the Pokémon Trading Card Game. And this is his first time qualifying for the World Championships.

"It's very overwhelming for my first time," he says as he looks around at the more than 3,000 fans packing the Walter E. Washington Convention Center, not far from the White House.

Overwhelming is a good word for it. There are two competition arenas at either end of the massive room—one for the video game competitions, the other for TCG, or Trading Card Game. There is a stage in the front of the room with three screens that project the most exciting matches, with live



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The 2014 Pokémon World Championships at the Walter E. Washington Convention Center in Washington, D.C.

The 2023 Pokémon World Championships took place over three days in Yokohama, Japan.

commentary from an ESPN-style booth a few yards away. Gasps and roars come from the mesmerized crowd at crucial moments in the games. If you just heard the audio, you would think you were in a stadium watching soccer.

Pikachu is everywhere. The little yellow creature is emblazoned on T-shirts, backpacks, hats, sweatshirts, and iPhone cases, and a giant inflatable Pikachu hangs suspended over the crowd, a smiling cartoonish deity for the pilgrims who have come from 33 different countries to watch players like Jaxson battle to become world champion. (There are three age brackets: juniors, age 12 and under; seniors, age 13 to 16; and masters, age 17 and up. Jaxson comes in 36th in the junior division.)

Caleb Judkins, 17, is one such pilgrim. He's an avid *Pokémon* video game player but isn't on the competitive circuit. He and his friends traveled here from Gainesville, Virginia, to see a competition firsthand. "It was on my bucket list to come," he says. "I wanted to see the battles in progress."

One player many people are here to see is Ray Rizzo, 21, a three-time world champion in the video game. No one has won Worlds more times than he has. He won in 2010, 2011, and 2012 but didn't make finals last year, so he's coming back this year with a vengeance.

I talk to Ray after his first match of the weekend. He's just won his battle, so he's feeling pretty confident. "I don't really get too nervous anymore because I've been playing for a long time," he says. (Ray once again did not make the finals, so he was unable to get a record-breaking fourth win.)

But for those who aren't veterans like Ray, this

weekend is packed with nerves. It's a year-long road to get here—to qualify for Worlds, players have to compete in regional and national competitions, earning a certain number of championship points in each depending on how well they do. The number of these points a player accrues over the season determines whether he or she is eligible to compete.

So why Pokémon? What is it about the characters and the games that inspires these people to spend months honing their skills and obsessing over strategy, or to don their Pikachu ears and travel across the world just to be here?

Jaxson Piwek's answer seems to sum it up—"All the friends I make."

"Everyone's so happy and passionate and really enjoying the game," says Jaxson's mother, Shauna. "It's a great community."

J.C. Smith, director of consumer marketing for the Pokémon Company International, says the idea of community is built into the game itself. "The principle they build the game around is communication," he says. "They really want people to talk and to come together, either online or face-to-face to build these communities. This is the ultimate expression of that.… This is a world championship, but it doesn't feel cutthroat to me. It feels like a community of people who like to play games coming together to play games."

The international element of the tournament does spur some divisions and regional pride—many spectators come armed with their country's flag, and cheers of "USA! USA! USA!" erupt when American Nikolai Zielinski wins the senior video game tournament.

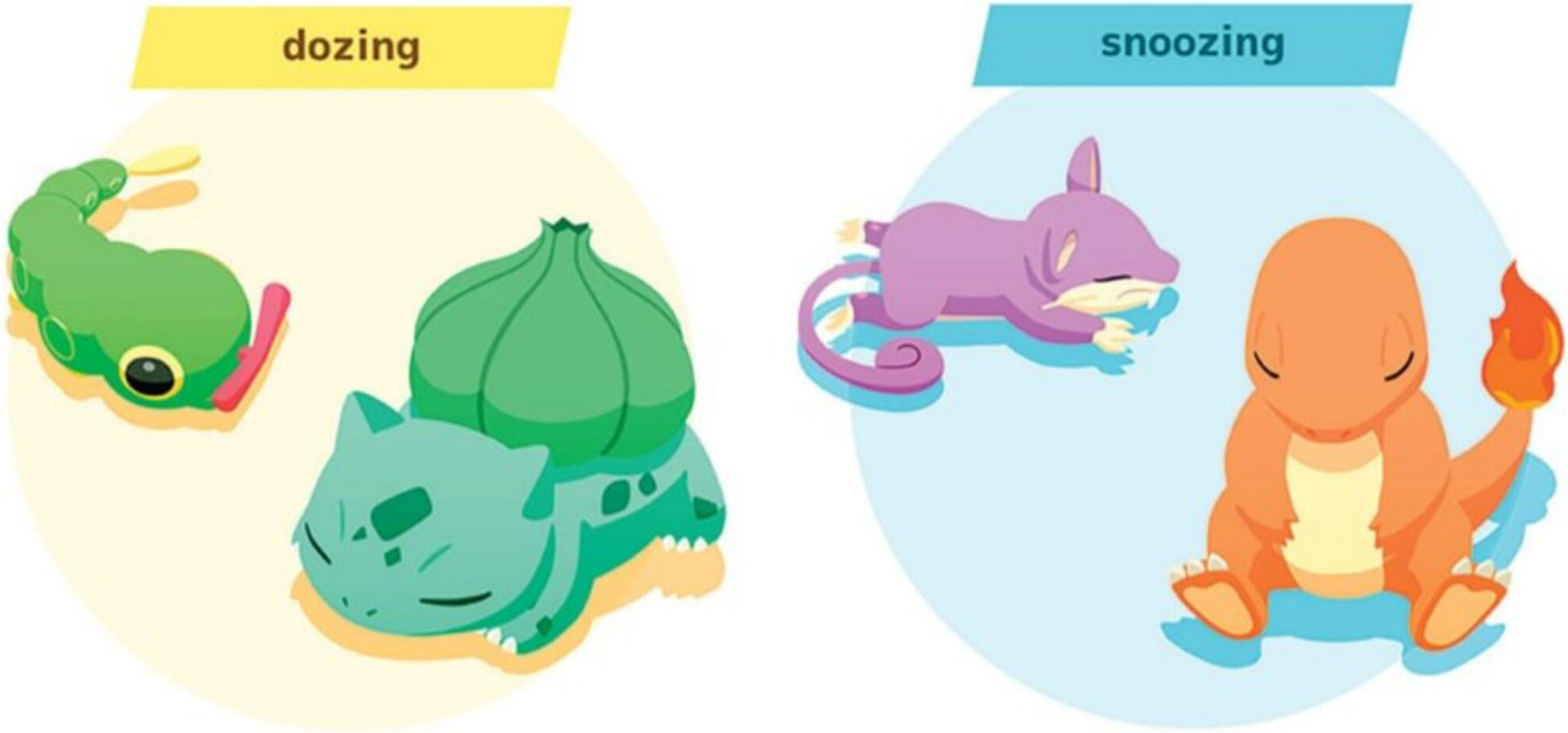
But people say the game still unites more than it divides. "You can be [an American kid] playing a Japanese kid, but you can totally get it and you can have an interaction through Pokémon," a company spokesman says of the tournament.

Nikolai, 15, also talks about community, beaming and energetic after his win. "The video game Pokémon community is the best community I've ever been a part of," he says. "Compared to other video games even, it's amazing. Everyone is so friendly and really nice. I've made friends just by placing well in tournaments—people have wanted to become my buddy. And everyone just helps each other out a lot, online and in person. It's a really, really nice community to be in, and great people to be around."

Andrea Bacca, 18, wearing a black and gold costume that includes striped knee socks and ears, puts it both bluntly and affectionately: "I like that we can all fit in and be nerds together."

Sunday evening after the finals sees 12 trophies awarded—one for each runner-up and champion in the three age divisions of the two games. The most coveted awards of the evening, the masters division trophies, go to Canadian Andrew Estrada for TCG and South Korean Se Jun Park for video game.

As the champions stand on stage, holding their Pikachu trophies and being showered with confetti, the cheers from the audience change. No longer are the viewers chanting country names or clapping for individual players. Now, yelling over the triumphant music blaring from the stage, the audience swells behind a single cheer: "Pokémon! Pokémon! Pokémon!"



Sleep and *Smile*

Pokémon entered the wellness space with two apps aimed at improving healthy habits.

BY ASHLEY ABRAMSON

AS PARENTS, WE PLAY A MAJOR role in encouraging our kids to make healthy choices. But motivating little ones to keep up with positive routines such as eating nutritious food, getting enough exercise, and logging plenty of sleep can be a major challenge. I'm a mom of two elementary-aged sons, and I know from experience that incorporating all that great advice from the pediatrician is far easier said than done.

For some families, the hurdle is primarily systemic, stemming from lack of access to healthy food options or health care. But for many, the main challenge is a busy schedule. "Many of us are on the go, which makes following our recommendations about things like sleep schedules and healthy eating difficult to adhere to," says Kristine O'Connor, MD, a pediatrician with UTHealth Houston.

One simple way to encourage kids to actually stick with healthy behaviors? Make them more fun. Some research has found that certain elements of gamification—creating games out of everyday activities—can be psychologically motivating, potentially helping kids learn. That may be because gamifying involves extrinsic motivation, or motivation driven by a potential reward. Incorporating a child's personal interests into an activity can also fuel in-

trinsic motivation, or participating in something just because it's enjoyable or meaningful.

Two new health-focused apps created by the Pokémon Company capitalize on both forms of motivation. *Pokémon Smile,* launched in 2020, uses augmented reality to teach kids how to brush their teeth and adhere to a daily tooth-brushing routine. *Pokémon Sleep,* which came to market in 2023, is a sleep-tracking app that rewards users with Pokémon depending on their sleep quality.

According to Deborah Tate, PhD, a professor in the health behavior department at the University of North Carolina, health-motivating apps such as these can be helpful in promoting positive health outcomes, especially if they incorporate factors known to motivate behavior, like rewards, personalized feedback, and encouragement to persist amid challenges. But so far, there's not a lot of research on kids' health apps. "The majority of the evidence base is adults, specifically adults in the majority population," Tate says.

I decided to do my own experiment, figuring it couldn't hurt to find new ways to motivate my boys. Like most kids, mine often complain about brushing their teeth before school and bed, and I've also had a hard time enforcing a consistent bedtime with our busy schedule (plus, we have our fair share of midnight wake-ups at my house).

As I downloaded the apps, I realized this isn't the first time Pokémon has ventured into the health space. My oldest son was a toddler when *Pokémon GO,* a mobile app that allows you to catch virtual Pokémon in your area, blew up in 2016. He was too young to play at the time, but I remember thinking the app could be a great way to get kids outside and moving around, all the while pursuing an interest (albeit on screens).

Pokémon Smile

The first app we tried was *Pokémon Smile*. Basically, you watch yourself brush on the phone screen in front of you (while donning a Pokémon of your choice on your head). As you brush, you erase purple gunk from an animated mouth at the bottom of the screen. Once the one, two, or three-minute timer is up—you can choose how long the session is—the app rewards you with a Pokémon to add to your virtual collection in the app.

I found the app to be cute and engaging, with colorful graphics and lively music. The rewards are especially motivating. My kids were more excited than ever to brush, and they stayed motivated throughout the entire session. They often get tired of brushing and give up, but the app encourages kids to "keep brushing" or "go faster" to keep them engaged. You can also set notifications that remind you to brush, which would be handy if you forget to remind your kids or if your children have their own devices. My primary complaint about *Pokémon Smile* is that it was a little cumbersome to hold the phone the entire time.

Some app-store reviewers note the aggressive brushing encouraged by *Pokémon Smile* could be painful or even lead to bleeding gums, especially for people who haven't always prioritized dental health in the past. We didn't have that problem, but it's probably a good idea to talk to your child's dentist about best practices for brushing before diving into an app like this one.

Pokémon Sleep

Next, we tried *Pokémon Sleep,* which motivates better sleep habits by rewarding kids with virtual Pokémon characters based on how many hours of sleep they get. For this one, you choose a bedtime goal, and you get a reminder when it's time to get ready for bed. Then you sleep with the phone face down next to you in bed (not on a bedside table, or, the

Using a smartphone camera, children can brush their teeth to rescue Pokémon in Pokémon Smile.

app notes, it might not accurately track). The app keeps track of how quickly you fall asleep and the stages of sleep you log. The more hours of sleep you get, the better your score the next morning—and the more Pokémon you earn.

My kids were excited to go to bed the first time we tried *Pokémon Sleep,* but they lost interest after a few nights. The story element of the game—Professor Neroli is researching sleep styles of Pokémon—might be a little complex for younger kids. Since my kids don't have iPhones of their own, it was a little annoying to have to leave our own device in their bed, and I felt a little uneasy about tracking their data. But overall, I could see why parents struggling with their children's sleep might find this app appealing and worth a try.

I DESCRIBED MY EXPERIENCE TO TATE AND O'Connor, and they agreed apps like these could be good tools for helping promote kids' health. O'Connor says she sees potential for apps like these to support families looking for new ways to incorporate healthy routines into their lives.

"There are a lot of areas where apps can be used, such as logging nutrition and water intake, tracking exercise, and encouraging mental health practices like deep breathing, mindfulness, and meditation," she says.

When you're looking for a kids' app, there are a lot of components to consider. Tate suggests choosing options that not only educate your kid on the behavior you want to enforce but provide personalized feedback about how they're progressing and suggestions for how to keep going in the face of obstacles. Apps like *Pokémon Smile* and *Sleep* that use artificial intelligence, which analyzes user data and tailors suggestions accordingly, play a part in this.

O'Connor emphasizes close parental supervision and making sure the app you choose is age appropriate. It's also vital to bear in mind expert recommendations about screen time. The American Academy of Pediatrics (AAP) recommends limiting electronics use for kids under 18 months old and only doing educational activities with a parent from 18 months to age 2. For kids between the ages of 2 and 5, the AAP recommends limiting non-educational on-screen activities to an hour per day, under parental supervision. Kids ages 6 and older benefit most from apps and activities that encourage healthy habits, O'Connor says. "But be sure to look at the app together and make sure it's safe," she adds.

And even if you find a great app, keep in mind that it doesn't replace other important practices. For example, O'Connor says sleep hygiene—things like following a consistent bedtime routine and avoiding screen time before bed—is critical for encouraging kids' sleep. And along with twice-daily brushing, it's still important to encourage healthy eating, flossing, and visiting the dentist on a regular basis. In either case, your child's medical providers are the best resource for their well-being. "The app might be useful to add on, but it's not a substitute for other healthy behaviors," O'Connor says.

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Pokémon

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How to Spot a Fake

Knockoff Pokémon cards are flooding the market. Know what to look for to avoid a scam.

BY COURTNEY MIFSUD INTREGLIA

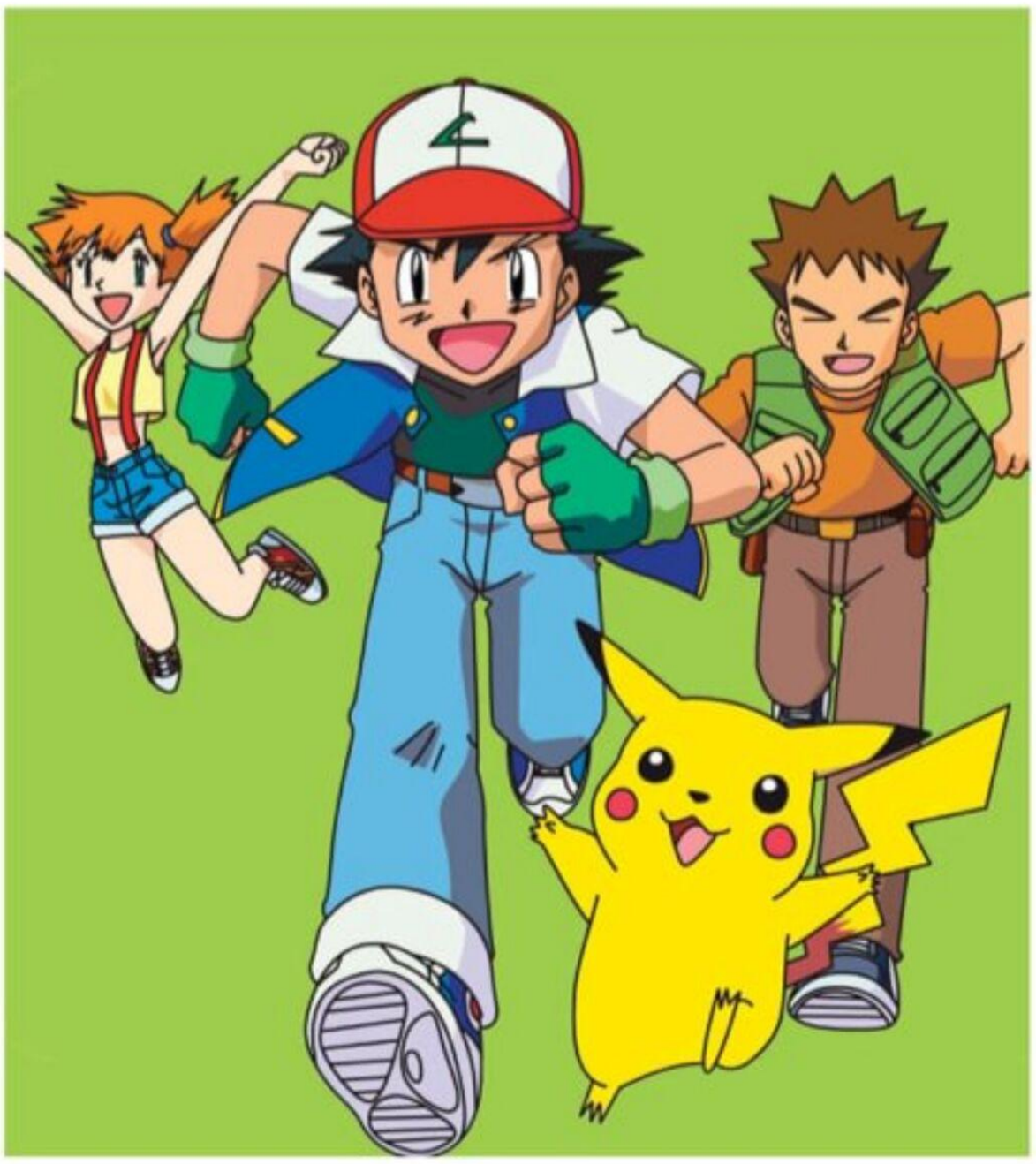
MIND THE "E"
Any instance where Pokémon is spelled without the accent over the e means that you might have a fake.

IS THE WEAKNESS RIGHT?
Make sure the weakness is correct for that Pokémon and that the energy symbol is clear and the same size as on other cards.

WATCH HP
Hit Points of more than 1,000 mean the card is fake. No Pokémon card has an HP higher than 340.

DIFFERENT FONTS
Compare the card to the official online card. Fakes often include different fonts or spelling errors in the description.

CHECK THE EDGE
A quick way to test if your Pokémon card is real is to take a close look at the edge. Real Pokémon cards have a very thin layer of black between the cardboard. Fake cards do not have this.

The Power of Pokémon

Twenty-five years ago, a Japanese video game came to the United States and began to capture millions of imaginations. Kids, adults, and humans in between have reveled in the unique creatures, the tactical battles, and the stories that everyone can relate to. These ingredients—with a whole lot of Pikachu—make Pokémon as wildly popular as it's ever been.